

**The Head of School at Dystopia's Edge:
Relationship-Based Independent School Leadership in the Age of Networks**

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Inspired by their commitment to support their students' complete development, independent school leaders are assessing and responding to the paradoxical effects of social media and mobile technology on their students and school communities. Networks linking students to each other and all forms of information have introduced new forms of ambivalence where technology brings utopian hopes and dystopian fears. Heads of independent schools take seriously the rise in anxiety, loneliness, and depression reported by students. Several unintended consequences of the technology have emerged, and schools require commensurate relationship-based leadership strategies to support students exhausted by their networked lives.

This study explores the influence of social media and mobile technology on students' social, emotional, and cognitive experience. Additionally, the study identifies the degree to which heads of school believe these innovations have influenced their school communities. Extending empirical data from heads of school, the study offers a conceptual path forward using cyberpunk science fiction (*The Matrix* and *Ready Player One*) and aesthetic alternatives (Seamus Heaney's *Bog Poems*) to explore the risks, obligations, and opportunities for schools and students.

The study pursues these aims through narrative inquiry with attention paid to the texts of real lives through autoethnography and fictional lives through techniques from literary

studies. Additionally, an original survey of independent school heads seeks to reveal how they understand the phenomenon and what responses feel useful in cultivating a thriving community.

The study's empirical research shows that heads of school perceive increasing ontological complexities introduced by social media and mobile technology to students' experience. Yet, an epistemological focus guides their engagement with struggling students. Additionally, aesthetic illustrations of the phenomenon illustrate the importance of developing in students the cognitive capacity to think simultaneously inside and outside the digital platforms shaping their lives. To extend effective relationship-based leadership practices in the age of networks, it is recommended that heads of school ground their practice in care ethics with renewed focus on empathetic listening. Further research could assess if a school's commitment to practicing care ethics contributes to reduced feelings of loneliness and anxiety among students and associated improvements in schools' climate and culture.

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1.0 Introduction

1.1 ‘Tis New to Me: Students in the Wake of Technology’s Progress

At the 2013 National Association of Independent Schools (NAIS) Annual Conference in Philadelphia, thoughts of revolution—both as uprising and transformation—circulated among independent school educators. In his final keynote address, NAIS President, Pat Bassett (2013), described what so many of us in attendance felt: a transformational revolution, “enabled by the Internet and the new technologies that open up limitless possibilities for how we live and work, and most important, how we teach and learn” (p. 10). The point was clear: the age of networks had arrived and complacent independent schools risked irrelevance.

In the five years since that conference, my school—like many independent schools—has experienced a schedule redesign and a facility renovation required to accommodate the big shifts in education essential for success in our networked world. Additionally, we recognized that the meshing together of so many perspectives carried a responsibility to ensure that every child and family in our school felt known and valued. Like so many NAIS member schools, we have taken seriously the requirement to recontextualize our mission, designing learning experiences relevant to our world and inspirational to our students.

For heads of school, this ongoing period of transformational innovation requires differentiated engagement with each constituent group. With boards of trustees, school heads play a central role in shaping strategy. With administrations and faculty, they support the execution of that strategy. With families in the community, they must illuminate the path forward and explain why the journey matters. During periods of substantial innovation and change, where constant

second-guessing is the norm, heads of school may be forced to navigate waves of confusion and dissent at multiple levels. Debates over the daily schedule, curriculum initiatives, technology plans, marketing strategies, capital campaigns, and facility repurposing consume the head of school's time and attention. Meanwhile, the most significant constituent group requiring the greatest level of care hides in plain sight—their students, who outwardly appear as they always have, but inwardly have never been more unsettled.

The head of school's engagement with students may appear to be just as it was a century ago. Students passing by offering a friendly hello, pausing for a short pep talk, fielding a question about their performance on a test or a shot they took in last night's game. The familiar stairwell or hallway may reveal the same well-worn path memorializing generations of students who came before this one. Composite pictures on the walls may surround students with the names and faces giving rise to a school's legacy. Yet, an invisible architecture now overlays that familiar setting. Although their physical bodies trod on through well-known pathways, students' minds follow new networks into territories largely unfamiliar to us all. Those new electronic architectures influence their relationships, complicate their personal identities, and condition their habits of mind in ways that lead some students to feel lonelier and more anxious than any generation before them.

While the digital age required fresh thinking about issues ranging from the function of school buildings to the content of curricula, the children sitting in classrooms were experiencing a radical transformation in their social and emotional lives. Jean Twenge (2017) explains:

Around 2012, I noticed abrupt shifts in teen behaviors and emotional states. The gentle slopes of the line graphs became steep mountains and sheer cliffs, and many of the distinctive characteristics of the Millennial generation began to disappear. In all my analyses of generational data—some reaching back to the 1930's—I had never seen

anything like it...It's not an exaggeration to describe iGen as being on the brink of the worst mental-health crisis in decades. Much of this deterioration can be traced to their phones. (para. 4)

Students' social and emotional lives today have been complicated by a series of paradoxes associated with social media and mobile technology. There is a world of constant online connection *and* increased physical isolation, instant status updates *and* an unsettling need for "likes," a hub for group camaraderie *and* the looming public shame of exclusion. I worry about how these rapid changes have complicated their identity development, emotional well-being, and sense of responsibility for each other. I worry that some of our best innovations in curriculum and instruction will fall flat if the obligations of their networked lives leave students exhausted, anxious, and depressed. Most importantly, I worry that school leaders have not thought enough about what's happening to students and how leadership may evolve to support their thriving.

At the most fundamental level, digital technology has altered the way people experience time and space in ways unprecedented in human history. Society faces challenges today that no civilization prior to this one has confronted, problems people are only beginning to understand resulting from their own innovations. Through their mobile devices and social media platforms, students experience dramatic new opportunities for identity creation and social interaction. They pass from one world to the next at dizzying speeds, navigating varied expectations and responsibilities across multiple platforms. Technology has intensified the familiar experience of crossing thresholds into new worlds and there is no turning back.

Of course, the dramatic significance and power of people crossing boundaries into new worlds is fundamental to the human experience and provides fuel for enduring stories. In Shakespeare's *The Tempest*, Miranda's lifelong isolation on a remote island and limited experience

with the broader world leads her to marvel at Ferdinand and his father who have recently found themselves shipwrecked on her enchanted island. Through Prospero's magic, they cross the threshold into Miranda's realm and she observes, "How beauteous mankind is! O brave new world / That has such people in't!" (5.1. 186-187). To which her father, Prospero, replies, "Tis new to thee." Familiar with humanity's capacity for both good and evil, Prospero finds no astonishment in what Miranda perceives.

Students today cross thresholds routinely, first from real to virtual, then from one platform to the next where they consume and create the content of virtual worlds. They are Mirandas on overdrive. They slip seamlessly into the worlds of Minecraft and Fortnite. They encounter endless streams of new and stylized faces through their feeds on Instagram and Snapchat. They spiral deeper into familiar and unexpected interests through YouTube and Twitch. When they turn to the adults in their lives and say some version of "O brave new world," the honest response must be, "Tis New to me." Unlike Prospero who knew all aspects of the world around him, students and adults in the digital age navigate these new boundaries together. The rise of networks coupled with the ubiquity and allure of gadgets connecting people through them has introduced a phase of modernity distinct from the spread of industrialization that influenced world civilization for the past two centuries. Today personal experience unfolds inextricably within a sprawling network spanning all reaches of the globe. The phenomenon is new and there is no way out of the system.

1.1.1 Reflective Modernization

"What hath God wrought?" This phrase from the Book of Numbers is the first official Morse code message sent from the supreme court chamber in the US Capitol building to Baltimore. The date was May 24, 1844, the moment British sociologist, Anthony Giddens, identifies as the

clear dividing line between what modernity was and what it would become. For the first time in human history, people could send messages to each other without having to cross physical distance, an innovation more important in the emergence of our society today than industrialization (Giddens, 1991). Not long after the telegraph connected people across distances, the telephone would follow and by 1970 satellites would begin orbiting the earth. Today, people have in the palm of their hand the capacity to connect with anyone, anywhere, a fact introducing utopian and dystopian possibilities. Adolescents inherently not equipped with reliable impulse control have intensely experienced the ambivalence.

Through my observation of their basic impulses, I find nothing new about the attitudes and dispositions of youth culture. The desire to be liked, the capacity to exclude, the potential to bully or scapegoat others within the community, the need to be noticed, the search for privacy, the tendency to evaluate self-worth relative to others, these have been characteristic inclinations of young people long before networks. Yet, technology has aggravated, accelerated, and expanded the conditions in which these tendencies are enacted. In conversations with colleagues across the independent school world, educators frequently talk about social media and mobile technology as a distraction. The logic suggests students' default point of focus is school and interruptions from the digital world steal their attention. Regretfully, mobile devices exercise a new and constitutive function in their lives. School, it turns out, is the distraction from what is real—although virtual—life experienced through their screens. Prior to the age of networks, daydreams were not a place to live. Students found no compelling place for their minds to stay outside classroom windows during less than enthralling lessons. Now, a surrogate self exists 'out there' and the illusion is the place where students may drift to live life itself.

It's worth looking back from the illusion through the looking glass and into the real world to understand what new conditions make this experience possible. The nature of interpersonal connections has changed in two fundamental ways because of networks. First, connection is continuous and communication is instantaneous. As a counterpoint to the way information spreads today through digital networks, consider Hester Prynne's experience in Hawthorne's (2004/1850) *The Scarlet Letter*. Compared with public shaming and stigmatizing through digital networks, the word-of-mouth gossip in fictional 1638 Puritan Boston feels slow and inefficient. Speculation about Pearl's father passes from one towns person to the next in comparably slow-moving whispers. Alternatively, in the age of networks, public shame can spread virally and instantaneously, literally destroying a person's reputation in real time with the entire world as a potential audience (Ronson, 2016).

Second, social relations have become virtual and symbolic. In contrast to the technologically mediated, virtual shaming, a person might experience online, Hester Prynne's embodied shame in *The Scarlet Letter* feels palpable and therefore more predictable. Because of her adultery, Hester is forced to stand on the scaffold for three hours of public humiliation and must wear a scarlet "A" on her chest when in public for the rest of her life. The material symbol of her shame worn on her physical body allows others to see the source of her suffering quite tangibly. Alternatively, because their real social lives play out in virtual spaces, the source of a student's anxiety and suffering may be invisible to the adults eager to help.

Instantaneous communication in virtual space passed among continually connected individuals intensifies further because of four affordances made possible by networks (boyd, 2014). First, online expressions and content may endure long after their creator's attempted deletion of that information. Second, an online expression's audience has no limit and virtually

anyone can bear witness to the utterance. Third, content may be quickly and efficiently shared among all who have access to the mediated environment. Finally, long after an online expression's creation, limitless users can seek and find the utterance. Persistence, visibility, spreadability, and searchability make more consequential all forms of activity online. Beyond the flow of information, emotion surges through the internet. Profoundly personal words and images pass through devices into a sprawling system, dramatically altering the kinds of relationships that are possible and the kind of people students may become.

Although the nature of interpersonal connections has changed, some may wonder if the phenomenon warrants extended inquiry. Adolescents have always been confronted with all kinds of risks and in some ways their mediated experiences make them much safer today than they have ever been. While that may be true of their physical bodies, their minds have not fared so well. If the data illustrating the dramatic upsurge in anxiety, loneliness, and depression are true, then this new form of risk requires understanding and action. The German sociologist Ulrich Beck defines risk society as "a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself" (Beck, 1992, p.21). In other words, risk in late modernity emerges from the innovations marking our progress in the first place. Giddens and Beck share the perception that every step towards utopia presents a commensurate step towards dystopia. A series of feedback loops structure the trajectory of progress in late modernity beginning with investments in technologies to advance civilization, continuing to the recognition of unintended consequences, followed by recursive investment in new technologies to mitigate the damages introduced by the original technology, *ad infinitum*. The razor thin line separating coordinated conspiracy theories from haphazard action gains considerable attention given the alluring possibility of a mastermind

coordinating the entire charade. Imagine, for example, the possibility that big pharma subsidized wider distribution of mobile devices among teens to increase sales of anti-anxiety medications.

As I watch my students navigate their digital lives, I sense that their phones present “manufactured risks” without antecedent in human civilization. Without question, advances during earlier phases of modernity introduced more visibly powerful destructive technologies—bombs from the sky indiscriminately shredding bodies and buildings, chemical weapons burning and disfiguring people from the inside out. This ghastly destruction gave rise to the dominant literary aesthetic of the early twentieth century, stark images radically juxtaposed to do their work on the reader. As Ezra Pound writes in his poem, “Hugh Selwyn Mauberley” (1994/1920), “There died a myriad, / And of the best, among them, / For an old bitch gone in the teeth, / For a botched civilization.” Modernist aesthetics offered a look back at destruction manufactured by civilization’s progress.

In a process Beck, Giddens, and Lash (1994) call “reflexive modernization,” technological progress advances through a self-perpetuating recursive pattern. Societies invest in various forms of modernization then must invest equally in resources to mitigate the unintended consequences of those advances, Chernobyl stands as a clear example. Society, in this formulation, becomes safer and deadlier in reciprocal ways. Every step forward becomes a simultaneous march towards utopia and dystopia. Social practice, therefore, requires the ongoing evaluation of information about the outcomes of innovations. Through the process, everything is open to reflection, including reflection itself.

That’s precisely where this story begins. As the head of an independent school responsible for the wellbeing of young people during this transformational moment in human history, I sense the time for reflection has arrived. This dissertation offers my appraisal of mobile technology’s

unintended consequences on young people's lives and on the climate and culture of independent schools. The most powerful communication networks and devices in the history of human civilization have altered the way people experience space and time and there is no way out of the system. Sleek, elegant, and addictive, the tools and platforms students carry have a constitutive function over all aspects of their experience.

1.1.2 Mobile Technology's Affordances and Unintended Consequences

Digital networks spanning the globe, making possible unprecedented interconnectivity through mobile devices and all forms of social media, have led to dramatic opportunities and unintended consequences. Specifically, these technologies have created simultaneously utopian and dystopian paths in students' relationships, identity, and habits of mind. Advances have introduced opportunities unimaginable even a decade ago and the collateral effects have begun to emerge. The blend of survey data collected for this study, appraisal of the research literature, and perspectives derived from relevant theory contributed to the assemblage of considerable affordances and consequences of social media and mobile technology including:

Relationships

- Constant virtual connection made possible new forms of loneliness.
- Life-sharing status updates introduced new ways to feel anxious over popularity.
- Virtual friendship hubs created new fears over being excluded.
- Perceived private messages brought new pressures to share and paranoia over who might see.

Identity

- Personal pages and channels introduced new forms of anxiety over baggage of the past.
- Dynamic opportunities to create identity caused new tensions between performance and reality.

- Creating identity online eliminated the separation between where real life ends and virtual life begins.
- Social media platforms introduced persistent new structures for gaining or losing self-worth.

Habits of Mind

- Compelling and addictive virtual life contributed to disregard for offline community.
- Engrossing vicarious experience became life itself, turning reality into distraction.
- The shrinking of space and time diminished patience and hastened human experience.
- Information echo chambers eroded civil discourse and intensified hate across differences.

While this form of reflexive modernity feels more conceptual than earlier versions addressing bodily risk, the approach has aesthetic precedent. Ezra Pound, for example, provided readers with an opportunity not only to consider modernity's physical collateral damage, he also presented readers with images depicting its toll on the human psyche. Consider, for example, his definitive imagistic poem, "In a Station of the Metro," running only two lines long: "The apparition of these faces in the crowd: / Petals on a wet, black bough." (1994/1912). The poem offers a glimpse of life in industrial society where monotony may reduce people to faceless apparitions. With their fixated gaze and placid faces illuminated from beneath by the glow of their screens, society may have finally and fully realized Pound's vision.

For independent schools in the age of networks to deliver fully on their missions, where providing unmatched understanding and care for our students' complete development remains the most fundamental value proposition, it is beneficial to think reflexively on the problem of what networks and mobile technology have allowed—or forced—students to become and how those changes have affected schools' climate and culture. The problem's intangible and emergent nature presents considerable challenges. Fast communication technology's dramatic restructuring of space and time has contributed to existential and epistemological crises threatening the ontological security that, in Giddens's (1991) view, is a condition for the creation of a coherent self capable

of coping with the complexity of late modernity. I observe this condition in my students and feel it in myself.

Throughout this project, I have felt to varying degrees paralyzed and empowered by a crisis of knowing and being. At times I experienced confidence that as a reader and interpreter of existing worlds, I understood the unintended consequences of social media and mobile technology on my students and my school. The research literature affirmed many of my own observations and I sensed some verifiable new knowledge emerging. However, a pervasive sense of ambivalence wore away many of my provisional convictions. At times it seemed like the right hand did not quite know what the left hand was doing. Multiple dimensions of what I hoped to know were simultaneously one thing and another—liberating and confining, connecting and isolating, generative and destructive. In those moments, the research process assumed the disposition not of interpreting worlds, but of creating them. At times the line between the two processes felt so blurred that I wondered if it ever existed at all.

1.2 Caution—Research Paradigm Shifts Ahead: Reflections on This Study’s Logic and Purpose

This study offers a prolonged reflection on the conditions at dystopia’s edge in independent schools. For the purposes of this project, *reflection* offers three distinct threads. First, through deliberate inquiry I am creating a perspective on ways of understanding and engaging networked adolescents in school settings—*reflection* as an observation made through careful thought. Second, through this appraisal I am confronting the limits of the degree to which and ways I perceive the phenomenon—*reflection* as an image produced by a mirror echoing back the subject’s

own limitations. Finally, the project marks a bending back on progress itself—*reflection* as the recursive gesture revealing innovation’s unintended consequences and laying the groundwork for future protections against collateral damage experienced in schools and society. My approach to understanding and representing this emergent ontological phenomenon, not visibly apprehensible yet hiding in plain sight, benefits from multiple discourses and ways of knowing. For some readers, the shifting of research paradigms from one chapter to the next may feel metaphorically schizophrenic. I have used postmodernism’s tools to carry out reflexive modernity’s agenda. However, my prose is not intended necessarily to engender in readers my students’ sense of ambivalence towards their technologically mediated lives. For the sake of clarity, here is a preview of the chapters to follow and the research paradigms influencing each chapter.

Titled, THE HEAD OF SCHOOL, the second chapter acknowledges from the start that the phenomenon being described cannot be fully separated from the one describing it. My use of firsthand narrative heightens attention to my relationship as the author/researcher with the subject. To this end, I blend autoethnography from my experience as a teacher and administrator with relevant research out of psychology, sociology, and education to represent the unique challenges educators face relative to students’ experience with social media and mobile technology. I use narrative and aesthetics to show that networks have altered the experience of community on independent school campuses and generally complicated the relationship-based priorities of independent school educators. I suggest that these challenges have inched schools closer to dystopia’s edge and that schools ignoring the social and emotional collateral damage caused by technological innovations are at risk of falling short of their fundamental value proposition to know and support students through relationships.

Chapter three, THE RESEARCH FRAMEWORK, more deeply contextualizes my subjectivist approach, and with my standpoint fully established, I present four research questions. Inspired by Deleuze's (1987) concept of heterogeneous terms hanging together without forced coherence, I describe my research methodology as an extension of Somerville's (2007)'s postmodern emergence into "postmodern assemblage." I use interviews with students whose social media behavior led to school-based problems to illustrate the value of going outside the lines of convention to fully express or explore ways of experiencing and knowing the phenomenon. Additionally, I use McHale's (1987) descriptive poetics of postmodernist fiction to theorize networked teens. To this end I discuss the character, Oedipa Maas, from Pynchon's (1966) *The Crying of Lot 49*. Through her attempt to sort out the estate of her deceased former lover, Oedipa stumbles upon what may be a grand conspiracy, or might simply be projections of her imagination. Oedipa embodies the epistemological crisis I faced in knowing networked teens leading me to wonder if instead of interpreting the lives complicated by networks, I am in fact projecting the world entirely. A feeling of ambivalence emerges for Oedipa and for me as both possibilities feel plausible. Hence, in my research framework I explain the need for empirical, verifiable evidence illustrating that the concerns I describe exist not only in my mind but also in the minds of others. Finally, after describing my original survey of independent school heads, I explain my rationale for using narrative and aesthetics to fully explore and represent the challenges and opportunities facing educators hoping to understand and support adolescents affected by social media and mobile technology.

Given the study's primary focus on how educators engage and understand networked teens, chapter four, OUR STUDENTS, presents my most comprehensive literature review exploring a variety of perspectives on the phenomenon. While I use existing research throughout all seven

chapters, this is the point in the study where I draw extensively from multiple disciplines to present a comprehensive review of what the research literature has to say about technology's impact on students' social, emotional, and cognitive wellbeing and the implications for schools. Yet, even in my use of research passing for legitimate "science," with its rigor, objectivity, and replicability, I wondered frequently how close I was to the truth of what I hoped to understand. Again, I felt like Oedipa, an interpreter of worlds untethered from epistemological moorings yet inundated with information. Through my selection of articles and my decisions assembling them into a story of their own, I felt more like a creator than interpreter. The moment took an ontological turn when I imagined Tristan Harris, co-founder of The Center for Humane Technology, as Neo from *The Matrix* leading a rebellion of students refusing capitulation to their mobile device's darker magic. In a stark and somewhat unsettling realization, I decided the time had come to call in the cavalry. I surveyed my colleagues, the heads of independent schools across the state of Pennsylvania, to understand their perspective on how social media and mobile technology affected their schools' climate and culture.

I felt the need for objective and verifiable data to know if social media and mobile technology have complicated students' lives. I hoped to understand in what ways and to what degrees other heads of school experienced what I felt. Additionally, I wanted to know what tactics they used when counseling students whose lives hung choppy in the wake of technology's headlong push forward. Chapter five, OUR PERSPECTIVES, is my post-postpositivist-influenced attempted jailbreak from solipsism. The survey results point to two clear takeaways: first—heads of school feel a similar sense of ambivalence towards social media and mobile devices that their students feel; and second—heads of school metaphorically approach students experiencing technology's unintended fallout with their detective hat on rather than their space

suit. In other words, students caught up in challenges brought by digital networks most frequently experience administrators interested in what can be known. To what degree it can be known. And who knows it. Less frequently do those students explore with administrators the dynamic new digital structures shaping their behaviors, heads of school interested in questions including Which world is this? Which of your selves operates in these worlds? What happens when your physical and virtual worlds are placed in conflict or when boundaries between worlds are violated?

My use of reliable and valid tools to measure how heads of school perceive social media and mobile technology's effect on their school communities helped me verify that, along with others in my professional position, this is a moment for reflection. The survey did not reveal any profound single truth, as if such a thing exists in the first place. It did, however, suggest a series of utopian aspirations, dystopian fears, and ambivalent concerns that warrant additional conceptual mapping. Chapter six, EXHAUSTED DYSTOPIA TO REPLENISHED COMMUNITY, uses techniques out of literary analysis to more fully conceptualize what's happening with students today, what risks lie ahead, and what paths school leaders might follow to more fully support their students and communities. For my purposes, the word exhausted means used up or depleted. The adjective describes the entangled feeling of exhilaration and fatigue resulting from the obligations of digital life. Replenished refers to the experience of reconnecting with a more enduring sense of self and community, reliable anchors in the swirl of digital ephemerality. Ambivalence within these possibilities cuts in all directions at once—physical and virtual reality both offering their own versions of exhaustion and replenishment.

I rely on the help of several characters, both fictional and real, to cut through the clutter and shape the conceptual trend lines from where we are to where we may be headed. The story begins with an autoethnographic grounding illustrating what's at stake when networks connect

adolescents across town on a typical Friday night. The story shows the real consequences of mediated experience. Next, I introduce David Levinthal, a real artist whose primary medium is photography. Yet, Levinthal does not photograph “reality.” He takes pictures of toys—metal soldiers from the *Third Reich*, which happen in an ironic twist to be his reality, the objects at the center of a little boy’s play as relatives in adjacent rooms recall their trauma (Young, 2002). Levinthal’s art demonstrates conceptually the powerfully real quality of mediated experience and I use John Dewey (1938) to form the educational connection. I want the reader to develop a broader framework for thinking about mediated experience because while specific technologies will evolve, networks will continue to bring people together vicariously. With the practical consequence of networks established and the conceptual power of mediation made clear, I shift to Kwame Appiah’s (2007) take on cosmopolitanism, a mindset helpful when people are meshed together through networks.

The discussion of cosmopolitanism elevates the utopian hopes and dystopian fears associated with globally networked experience. The chapter’s main character, Wade Watts, the hero in *Ready Player One* (Spielberg, 2018) continues the conceptual trend line exploring the dystopian possibility. The year is 2054 and the real world is tormented by poverty and squalor. The OASIS, an immersive virtual universe, offers users an escape from the harsh conditions of their physical reality. While plugged into the system, people can do or become whatever they choose. By winning a contest conceived by the recently deceased inventor of the OASIS, Wade gains control of the entire system and decides that what started as a form of liberation from the real world’s chaos and despair has become yet another prison from which people needed pathways of liberation. As a companion point, I introduce Neo, the hero from *The Matrix* (Wachowski, 1999), who seeks liberation from a consensual hallucination blinding people from the truth that

they are slaves born into bondage, a virtual prison they cannot smell or taste or touch, a prison for their minds. The juxtaposition of these characters offers readers a chance to see a similarity—both characters grapple with the unintended consequences of progress and demonstrate the transformational power of seeing simultaneously inside and outside the system, and a difference—machines force humanity into the matrix while alternatively people choose the OASIS for themselves.

At the end of *The Matrix* and *Ready Player One*, both heroes escape their virtual worlds. Neo flies skyward, overcoming the system's artificial limitations in pursuit of humanity's liberation. Wade Watts simply shuts the whole simulation down and spends lazy afternoons in his apartment with his girlfriend. Neither solution feels fully replenishing. Neo has a full-fledged war to lead, while Wade Watts's decision to shut down the system for two days each week is the equivalent of punting. Both films suggest the depthless quality of life on the screen. The research literature suggests the same applies to students' experience with technology today in ways ranging from expendable relationships, to hyper-performed identities, to a wearying obsession over superficial likes.

I needed an aesthetic counterpoint, something substantial, gritty, and enduring. As a contrast to the screen's clean and crisp images where everything is possible and ephemeral, I wanted layers of history and enduring identity, something without an off switch. The Irish poet, Seamus Heaney (1975), and the bog people remembered in his poems, push the conceptual trendline back to something more enduring, the metaphoric groundwork for replenished community. In Heaney's poems, the bogs preserve all aspects of past experience including beauty and violence. Far less mutable than the flashing images on the screen, they offer a location of deep and immutable cultural identity. Readers associated with independent schools likely perceive the

metaphor's implicit significance. Like those bogs, independent schools each offer a distinctive and layered context, preserving and shaping identities. For many independent schools, the past holds painful complexities where inequality and abuse are part of the narrative. The bog poems offer a metaphoric way of excavating those buried lives, conceptualizing systemic change, and reviving moral purpose embedded in the school's tradition so that students today may benefit from the positive social and emotional anchoring. I think that in a world where time and space have been radically changed, where expectations are instantaneous and "virtually" anything is possible, children and adolescents need schools that have collectively reflected on and accounted for the complexity of their past and the collateral damage exacted by society's network-based innovations today. Independent schools effectively blending tradition and innovation are well positioned to provide students with the security of community-defining core values contributing to an ethic of care for self and others in an inextricably meshed world.

Coherent and intentional school communities provide students with the backdrop for social and emotional grounding and refuge while grappling with feelings of ambivalence intensified by social media and mobile devices. Students routinely experience contradictory attitudes and feelings about the tools shaping their world. They face repetitive uncertainty over which path to follow. These tensions emerge in the endless tug to be simultaneously consumers and creators of life on the screen. I open the final chapter with Pat Bassett's (2018) assertion that schools have not paid enough attention to growing anxiety and depression among school-age students at all levels, collateral damage from the revolution he described five years prior. The final chapter also offers the return of Frank Boyden, the iconic head of school turned straw man, now revived to signify the differentiated ethic of care required to support networked adolescents. It's not an overstatement to say Frank Boyden is this book's hero.

Long before digital networks connected the globe, Frank Boyden understood the transformational power of connection. Chapter seven, DIGITAL HUMANITARIANISM, recounts the story of his decision to put his desk in the school's main thoroughfare. Above all else, Mr. Boyden believed that Deerfield Academy's success depended upon his students. He watched them closely and could detect small changes within and among them (McPhee, 1992). His desk was the hub of student networks before ethernet cables connected buildings or satellites circulated above the world. In response to the unintended social, emotional, and cognitive disruptions students and schools experienced in the wake of technology's progress, this project calls for an ethic of care for the digital age, a recontextualized elevation of what independent schools do best—inimitable understanding and unconditional regard for children and families.

1.3 Care Ethics: Towards Replenished Community

To revitalize the supportive power of school communities for the digital age, I am advocating for a commitment to care ethics. Introduced in the early 1980's (Gilligan, 1982, Noddings, 1984), care ethics has proven to be an effective disposition across a range of helping professions. Given the ambivalent and unfamiliar conditions associated with students' networked lives, I believe educators committed to care ethics have the best potential to cultivate a thriving school culture. The form of relational caring emerging from care ethics stands in contrast to virtue caring. Virtue caring emphasizes the importance of carers and their wisdom. They analyze what's right and wrong and extend their care by encouraging those cared for to shape up (Noddings, 2012). Care ethics concerns itself with the caring relation, an attitude emphasizing attentive listening and empathetic observation. Exhausted by the ambivalence of simultaneously utopian

and dystopian pathways, students' anxiety cannot be cured with logic, but it may be lessened by love. In this moment, the guiding question, "What are you going through?" is asked not to prove a point or extend an argument, but to receive the experience and live it with the student. The approach has the potential not only to help educators understand the inherent tensions in networked lives, but to "encourage children to think about others and to try to understand what they are feeling...to build up a disposition to care, a habit of listening and feeling with others" (Noddings, 2012, para. 17). With so many caustic emotions running through networks, this may be the healing agent so desperately needed. Care ethics offer a pathway to relational and community replenishment.

The risk ahead lies in standing flatfooted, disconnected from the profound complexities students navigate every day, mostly on their own. To push the science fiction metaphor one step further, heads of school today are called upon to lead at dystopia's edge. In contrast to the deep relationships independent schools promise, online communities tend to flatten out social relations and render people as expendable commodities. The experience proves to be paradoxically exhausting and replenishing:

When online life becomes your game, there are new complications. If lonely, you can find continual connection. But this may leave you more isolated, without real people around you. So you may return to the Internet for another hit of what feels like connection. Again, the Shakespeare paraphrase comes to mind: we are "consumed with that which we are nourished by." (Turkle, 2011, p. 227)

School leadership at dystopia's edge calls for replenishment, not merely raising awareness to the possibility of the manipulation and control of exploitive technology but nourishing students with connections that reflect the best of what independent schools have always done well. Yet, in the

age of networks, the way educators understand and engage students requires revision. The work of replenishment may appear to be subtle, but recontextualizing relationship-based education in the age of networks requires an ethic of care, receptive to students' experience, and attentive to who they become as they process ambivalence at several levels of their lives on and offline.

Relationship-based independent school leadership in the age of networks calls for school leaders to join students in grappling with the paradoxes contributing to their uncertainty, anxiety, loneliness, and depression. Heads of school share an opportunity to engage communities in dialogue about how the digital connections and social media platforms underlying social and working lives shape identities—how we see each other and how we understand ourselves. Manifest challenges in schools, ranging from socio-economic and racial divisiveness to the dramatic rise in anxiety among students, have new structural underpinnings in social media platforms deepening and accelerating those conditions. As a result, school leaders at dystopia's edge do face a specific kind of hardship. It plays out in students' social and emotional lives where self-worth depends on "likes" and fear of missing out never ends.

Yet, stabilized by emotional anchors formed through relational ethics, students may develop the capacity to use networks for good and to thrive. Standing shoulder to shoulder with students, educators may help them resolve some contradictions. In response to other issues, educators may guide students to live with the ambivalence as a condition of being. In all cases, educators can help students develop, while refining in themselves, the emotional dexterity and relational empathy necessary to not close their minds, to avoid binary thinking—friend vs. enemy, simulated vs. real, outsider vs. insider—and to embrace a more dialectical understanding of the world. They may discover that it is possible to go outside the lines, resisting structural conditions encouraging the erosion of compassion and sitting with those constructed by the system to be their

enemy. This moment of reflection leads me to advocate for an ethic of care pushing beyond the call for digital citizenship, a concept that evokes the insider/outsider binary. Through attentive and receptive listening as the practice of care ethics, school leaders can model decency and kindness contributing to digital humanitarianism, resisting the easy temptation to separate students' screen lives from their real lives and embracing the complex whole of their experience.

2.0 The Head of School

“The cultural environment in which one lives ought to be as important as the air he breathes...the food he eats.”

(Mandel, *School Ties*, 1992)

2.1 Farewell Mr. Boyden: Leading Independent Schools in the Age of Networks

At the top of a dozen concrete steps and through a heavy door that locked only some of the time, guests entered the foyer of Weiss Hall. The entryway’s carpet was worn flat and an exposed lightbulb buzzed at the top of a narrow stairway leading to the second floor. The building felt heavy and tired, and in early August of 1996 its residents benefited from neither air conditioning nor a cross breeze. Four hallways separated approximately 40 rooms and each room’s grey tile floor dampened light from fluorescent tubes that buzzed when electricity flowed. My apartment, located on the first floor, felt decadent compared to those rooms and to the college dorm room I had vacated just two months prior. While my apartment had no kitchen and my shower stood makeshift in the corner of the bedroom, it had everything else an intern at a 200-year-old college prep school could afford to want.¹

¹ While the stories described in this study are true, I have changed names and other details to ensure confidentiality. In several instances, to protect individuals’ privacy and to sharpen meanings, I created composite portraits. The experiences described happened over a span of just over 20 years at two independent schools where I served in a variety of roles from classroom teacher to headmaster. I draw upon my lived experience as a professional educator. I made sense of the data as a university researcher and this study is the story of that meaning making.

This apartment, along with three meals a day in the dining hall, health benefits, and \$10,000 rounded out my compensation for my first job out of college. I earned it. From September through May of that academic year, I covered classes, coached soccer and basketball, and co-ran a dormitory for 40 boys in the seventh through tenth grades. I do not recall a description outlining my duties as a dorm parent and I am confident there was no training program. The dormitory master did, however, allow me to shadow him several times before my first evening “on duty.”

“So that’s it?” I asked. “You go to dorm dinner at 6:00 and pick up any evening medicine. Then at 7:30 you walk the halls making sure each boy is at his desk with the door propped—and studying. Then you circulate from the end of study hall at 9:30 until lights out at 10:30. Then you make rounds one last time to make sure everyone is in bed.” My summary demonstrated a level of proficiency only a 23-year-old with no experience could muster. As it turned out, I was clueless. But since the boys in the dorm were oblivious to my inexperience it all worked. This was the blind-leading-the-blind where the leader was genuinely convinced he could see.

Yet, I had two advantages: first, I was fascinated by the organization of systems that develop people’s talent. From Jack Welch’s relentless pursuit of improvement at General Electric (GE), to John Wooden’s methodical commitment to preparation at the University of California Los Angeles (UCLA), to Fred Rogers’ radical kindness in his neighborhood, systems that brought out the best in people or that led to effective results mesmerized me. Second, the well-being of the students in my dorm captivated me. What components of this system led to their success? Why did some wither in the face of adversity while others thrived? In what ways might my brief conversations with them through the evening influence their attitude and motivation? The campus was my lab—24 hours a day, seven days a week. From the classroom, to the basketball court, to the dining hall, to the dormitory—everyday.

While all those spaces offered insight, the dormitory in the evening became ground zero for the real story. In the classroom and athletic field, students could briefly uphold deliberate disguises. Dormitory life burned with authenticity. David's room was at the end of the hall on the second floor, a part of the building that felt unapologetically muggy early that September. The air hung heavy, saturated with the smell of football practice, old laundry, and teenage boy body wash. The energy of sleepaway camp evident in August had given way to a quiet resignation—this is our life. Florescent lights hummed from all the rooms on the hall except for David's. From his room spilled a cool ambient glow from the \$6.99 lamp he bought from the CVS at the corner of campus. His room matched his disposition—casually meticulous. In all things he opportunistically embraced useful irony.

A small carpet served as a welcome mat at his room's entrance. While other boys' closets coughed up tangled clothes, David's looked like a bento box of campus casual wear. He made his bed meticulously and a small beanbag sat in the corner of his room. On most nights, I turned the corner to find his head tilted downward resting on his hand as his eyes scanned a textbook. This night was no different except for the fact that he had taken a wire coat hanger from his closet and fashioned it into a kind of antenna that he wore like a crown on his head. Over his shoulder and outside his window was the dorm's front yard and Wheeling Creek—a sad little river that students speculated mutant fish occupied.

“Oh hi Mr. Barnett,” David said, looking up through glasses and smiling. “Hi David,” I replied. “I see you have an antenna on your head.”

“Oh yeah...I thought I would try to capture the energy from Wheeling Creek to help me with my math homework!”

“That's really creative,” I said. “How did you ever come up with this?”

“Are you kidding? I am grateful that my room has such a splendid view—I should use it.”

Aside from his imagination and penchant for irony, I remember David for his gratitude that emerged from two conditions of being. First, he had a casual positive attitude. David was aware that it was hot, that the lights made an uncomfortable hum, that the hallways felt cramped. He simply chose to focus on something else. Second, he had fortitude. While several of his dormmates would say—it’s too hot...this is miserable...I can’t study tonight. David would say...it’s too hot...that’s unfortunate...I’m almost finished reading the English assignment.

I could go on about David, but this story is not about him. It is a story related to *why* I could go on about David. I uniquely remember David and the other boys from that year because I knew them without distraction. I knew them before the world changed, before networks and mobile technology gave us unlimited access to all forms of information and to each other. During those walks through evening study hall, they each had my undivided attention and I had theirs. Throughout my years (1996-2014) at the same college preparatory day/boarding school, I watched communication technology change from a payphone at the end of the hall to a smartphone in every student’s hand. At times, the advances felt emancipatory—phones in their rooms, network ports for plug and play desktops, wireless access supporting mobile devices. But for all the advantages that increased interconnectivity brought, there were always clear and present risks. Young people in our care gained unprecedented levels of access to each other at precisely the developmental stage when impulse control is the weakest. This new network infrastructure altered the dormitory’s social landscape in ways no physical remodeling ever could and none of us anticipated. The arrival of information networks did not change the building, but the people inside would never be the same.

In the blink of an eye, innovative technologies connected students with each other in spaces that were inaccessible to administrators, a change that required new approaches to school leadership. Prior to the rise of networks, effective leadership started with simply being present, engaged, and attentive. The movie, *School Ties*—released in 1992 and depicting preparatory school life in the 1950’s—portrayed a memorable version of dorm parent presence. When the buttoned-up and bow-tied Mr. Cleary discovers the boys in his dormitory performing a raucous rendition of *Smokey Joe’s Café*, he interrupts and explains: “the cultural environment in which one lives ought to be as important as the air he breathes...the food he eats” (Mandel, 1992). My job—based on Mr. Cleary’s example—was as much climate control as it was command and control, work that was relationship intensive. Initially, this went according to plan and my dorm’s communal area felt like life imitating art imitating life. Messy pizza parties, animated group discussions with the headmaster who dropped by for a visit, group study sessions—with girls, and impromptu creative projects involving whatever props they could find, all unfolded on any given night in a dormitory with 40 boys. Through those experiences bonds formed that bind people even to this day. I am suggesting that my non-networked boarding school campus did not offer students the opportunity to experience a robust social life without leaving their dorm room.

However, while those pre-networked conditions encouraged more face to face interactions, this is not a *Paradise Lost* story. Nostalgia’s quaint charm rests on the reality that what is longed for is gone *and* might not have been as great as remembered. Prior to the age of digital networks, the independent school campus offered a form of intense insularity that in the worst scenarios prolonged and concealed intolerance and abuse. The cultural environment that Mr. Cleary, the buttoned-up dorm master from *School Ties*, oversees is polluted with antisemitism and prejudice and the film shows no evidence of the fictional St. Matthew’s commitment to eradicating those

oppressions. On the contrary, the film demonstrates ways the elite use coordinated and systemic intolerance to maintain privilege. From start to finish *School Ties* is a dystopian story for David Green, the working class boy forced to hide his Jewish heritage while winning football games for the blue bloods who invited him in with the expectation that he would leave significant parts of himself out.

David Green's fictional dystopian experience at an elite boarding school portrays the dark underbelly of institutional tradition where the concept may be used to justify a variety of oppressions and injustices. The rise of networks and proliferation of mobile technology made less suppressive the campus walls that once concealed exclusionary practices, racism, sexism, and abuse at some schools. Networks provided once marginalized or silenced people with a voice and a platform. As independent schools do the vital work of equity and inclusion, many will be challenged to come to terms with trauma from their past. In this sense, networks did not disrupt a paradise, they provided new pathways to challenge privilege. Simultaneously, as networks impeded some forms of systemic oppression, they also made the positive aspects of institutional coherence more complicated. Specifically, mobile technology and social media introduced an addictive new location for student life. Independent schools whose past includes victims of marginalization or abuse are called upon to excavate those buried and silenced voices and to complete the systemic changes necessary to ensure that all constituents share an equal opportunity to enjoy complete engagement in the school experience. This vital equity and inclusion work at all schools will happen in a networked world that provides new pathways to self-awareness and community building. Schools cultivating communities that make equity and inclusion a vibrant part of their traditions will need to account also for the challenges associated with building strong

relationships at a time when networks offer people the opportunity to be alone together (Turkle, 2014).

From my observations, once devices vicariously connected students, the common area took on an unusual silence. Students spent much more down time alone in their rooms. Networked video games, social networking, and all forms of personal multimedia formed new hubs of mediated connection replacing the physical space as the primary location of belonging or exclusion. Connection did not disappear in this new configuration, yet school leaders' ability to monitor and support the cultural environment significantly changed. Students were alone together and leadership at all levels of the school needed to adapt to these changing conditions (Turkle, 2011). Today, school leaders share a generative opportunity to build genuinely inclusive communities while reimagining the unifying practices associated with the school's tradition.

2.1.1 Know the Child

Although students have always found ways to connect and communicate outside adult influence or control, the rise of mobile technology and social media not only changed how teachers and administrators understood and connected with them, but also fundamentally altered how students understood themselves and each other. In education generally—and the independent school world particularly—this change was cataclysmic. Relationships are educators' business; through all my positions in independent schools—from intern, to classroom teacher, to admissions director, to head of school—one guiding principle mattered over all others: *know the child*. The titans in our industry model this dictum. Frank Boyden, who served as Deerfield Academy's Headmaster from 1902 to 1968, pulled the school from the brink of closure and turned it into a nationally-recognized boarding school on the strength of relationships.

His success was the result of his understanding every student in the school, “for sixty years or so, until his bad hearing made it impractical, he gave out all grades himself. There were no report cards. Each boy had a private talk with the headmaster six times a year” (McPhee, 1966, p. 67). His relationship with students did not end at their graduation from Deerfield:

He would appoint a kind of recording secretary in a group going to any given college, and expect regular reports on everybody’s progress. If anything began to go wrong academically, he would send a Deerfield teacher to tutor the deficient alumnus until he was past the crisis. If anything was amiss morally or psychologically, he would go himself even if he had to travel more than a thousand miles. (McPhee, 1966, pp. 73-74)

Our networked and hyperconnected world makes this kind of contact quicker and more efficient for contemporary heads of school seeking to follow Boyden’s model. Yet, his effectiveness had less to do with efficiency and more to do with staggering time and effort attentively listening to students, the kind of patience required to form deep and lasting relationships. Mr. Boyden’s formula proved to be so compelling that Jack Pidgeon, a Boyden protégé and headmaster at The Kiski School for 45 years, titled one of his best known speeches, *Of Course I Know Who You Are* (2000), where he emphasizes the importance of knowing students individually:

And there is still another way I know you. The “Thank you, sir,” “Thank you, sir,” “Thank you, sir” “Thank you, sir,” which I hear like drops of water following one upon another when I’ve done something to earn your thanks. To anyone else, I suppose, they would all sound monotonous and boring, but I know them in their separate sounds and with meanings and specific identities. (p. 33)

So what complexities emerge when the face-to-face thank you gives way to texts, tweets, snaps, and posts?

For now, the short answer is: *confusion*. Now entering my tenth year as the head of an independent school, dozens of conversations with students navigating paradoxes in their lives routinely suggest that mobile technology and social media have been a mixed bag—I do not really do what we are doing in that picture, I was not actually threatening anybody, I did not think it was bad to share homework through Google Docs, I only posted that for the likes—it is all about the likes. I routinely wonder what is the antecedent to the pronoun I in each of their utterances? I am troubled that the apparent glossy mirage of technologically mediated interactions contributes to the occasional disregard for the humanity of everyone involved. Sherry Turkle (2011) shares this concern: “when I speak of a new state of the self, itself, I use the word ‘itself’ with purpose. It captures, although with some hyperbole, my concern that the connected life encourages us to treat those we meet online in something of the same way we treat objects—with dispatch” (p. 168). In my work understanding students as a head of school, I have found that social connections in all forms—bullying, flirtation, deception, self-depiction—happen with greater intensity and impunity when mediated by technology. Frequently, the humanity of the people involved disappears altogether.

In contrast to the deep relationships formed at my pre-networked boarding school campus, online communities tend to flatten out social relations and render people as expendable commodities. The experience proves to be paradoxically exhausting and replenishing. For those born between the mid-1990’s and the early 2010’s, the first generation whose entire adolescence has been with a smartphone, the experience has brought complications requiring new ways of understanding, engaging, and supporting our students, “Social networking sites like Facebook promise to connect us to friends. But the portrait of iGen teens emerging from the data is one of a lonely, dislocated generation” (Twenge, 2017, para. 28). Technology has changed the way we

understand ourselves and each other, creating new risks and opportunities for leaders at all types of schools. Heads of independent schools, whose success hinges on their understanding of the students they enroll, must pay close attention to how mobile technology and social media are influencing adolescent identity development and behavior, contributing to loneliness, anxiety, and depression.

Although the rise of networks has directly and indirectly created threats and opportunities for every aspect of independent school operations—from admissions and marketing, to alumni relations and fundraising, to curriculum and instruction, to student life and school culture, to governance and leadership—the smallest unit of these sweeping changes begins at the very core of our business—how we perceive, understand, and connect with our students. Tim Fish, the Chief Innovation Officer of the National Association of Independent Schools (NAIS), encourages school leaders considering any type of innovation to focus on the school’s core identity and to establish the exact problem or opportunity requiring resolution. To this end, he observes:

I love the quote from Albert Einstein that goes something like this: If I had an hour to think about a really big problem, I’d spend 55 minutes thinking about the problem and five minutes thinking about the solution... When it comes to innovation in our schools, we don’t spend enough time thinking about what core problems we’re trying to solve. So for me, it’s not about fundamentally changing the mission of a school; it’s about looking and applying innovation and innovation practice to enhance the mission and to continue to become better at being who we really are. (Fish, 2017, p. 50)

Educators and administrators continue to solve sweeping problems without fully understanding them and they seize new opportunities that are little more than temporary victories. However, in this project I assess the evolving responsibilities of independent school heads at the dawn of the

age of networks, a time when students' social and emotional lives—and the forces shaping their identities—have radically changed. Since the relationships with students and their families form the core of the education business, it is necessary to think about how networks have changed students' social experience and personal identity and what implications those changes have on leadership.

To be effective independent school leaders, the kind that truly know their students, it is necessary to arrive at a nuanced understanding of what happens when the infrastructure shaping our students' lives—mobile technology and social media—fundamentally changes the way they connect with each other and define their identities. For Turkle, the answer was the end of intimacy as we know it. She explains:

My own study of the networked life has left me thinking about intimacy—about being with people in person, hearing their voices and seeing their faces, trying to know their hearts. And it has left me thinking about solitude. To experience solitude you must be able to summon yourself by yourself; otherwise, you will only know how to be lonely. (Turkle, 2011, p. 288)

I share Turkle's concern over the potential loss of intimacy as we know it and its implications. The absence of intimacy may result in a loss of empathy, an erosion of the capacity to recognize the value of close relationships, the recognition of human fragility, and that our lives are interconnected. Students may forget that the messenger on the other end of the mobile connection continues to suffer even after powering down the phone. Yet, those same tools, if used well, may provide reliable ways to enhance connection.

Reflexive modernity's logic suggests that every step towards utopia brings a concurrent step towards dystopia. Many students experience this ambivalent march without the coordinated

adult support they need. While in the moment adolescents may prefer this condition, the tools have proven to be far too complex for them to continue navigating alone. In *It's Complicated*, boyd (2014) explains:

Teens are struggling to make sense of who they are and how they fit to society in an environment in which contexts are networked and collapsed, audiences are invisible, and anything they say or do can easily be taken out of context. They are grappling with battles that adults face, but they are doing so while under constant surveillance and without a firm grasp of who they are. In short, they're navigating one heck of a cultural labyrinth. (p. 53)

I will always remember the moment I felt their struggle for the very first time. It was the fall of 2004 and I was making my rounds through the dormitory—long after David had left his room and coat hanger antenna behind. I walked into a freshman's room and noticed a surprising picture as the background on his desktop. It looked like five of his female classmates, but they were in their bras and panties posing provocatively. Smiling like he had discovered the keys to ascension, he innocently explained that he found the picture on MySpace, "Pretty much everyone has this picture," he explained. Sure enough, down each of the four hallways, several of the 38 boys had this picture on his desktop. So many questions emerged: what has happened to privacy? What does intimacy mean in this context? What impact does the distribution of this picture have on the girls' identity? How can administrators protect them? Is there a risk for increased anxiety or depression for those involved? How has technology changed human relationships, our sense of self and each other? How has it complicated our sense of responsibility and care for each other? More than a decade later, parents, school officials, counseling professionals, law enforcement, and others continue struggling with these questions. Sometimes it feels like administrators are leading schools at dystopia's edge.

2.2 Don't Lock Your Knees: Independent School Leadership at Dystopia's Edge

Regardless of their political orientation, heads of independent schools lead their communities with the broader culture at dystopia's edge. This reality heightens the existing concern over the cultural labyrinth teens must navigate. In his inaugural address in January of 2017, the newly elected 45th President of the United States asserted:

But for too many of our citizens, a different reality exists: Mothers and children trapped in poverty in our inner cities; rusted-out factories scattered like tombstones across the landscape of our nation; an education system, flush with cash, but which leaves our young and beautiful students deprived of knowledge; and the crime and gangs and drugs that have stolen too many lives and robbed our country of so much unrealized potential. This American carnage stops right here and stops right now.

By the end of that month, the world witnessed a surge in sales of dystopian novels. Sinclair Lewis's *It Can't Happen Here* reached the eighth spot on Amazon's best-selling books list. Aldus Huxley's *Brave New World*, not even in the top 100 prior to the Trump era, cracked the top 10. George Orwell's *1984* reached number one with sales increasing by 9,500 percent since the pre-Trump era (Wheeler, 2017). Throughout his Inaugural Address, Trump suggested that the "Yes We Can!" optimism defining the Obama years led to a republic of despair. For many concerned citizens, an egomaniac marketing expert with a knack for offering fairytale solutions to complex problems while preying on the fears of the fallen majority, dystopian fiction seemed a suitable place for guidance on navigating the new world order.

Some of the fears of these citizens have proven true. After his historic visit with Kim Jong Un, the President remarked: "hey, he is the head of a country and I mean he is a strong head. Do not let anyone think different. He speaks, and his people sit up at attention. I want my people to

do the same” (Watson, 2018). While he later suggested he was kidding, many could see that the joke is on them. Many heads of independent schools felt the potential for this dystopian-style exploitation long before Trump took office. Utopian aspirations fueled by the possibilities of increased interconnectivity always had dystopian potential. My first headship started in the summer of 2009, the bottom of the Great Recession and just months before nationwide unemployment peaked at 10 percent. As one of my colleagues explains:

After 2008, new school heads often entered schools where things previously enjoyed in excess—students, tuition dollars, applications, and faculty morale—were now in short supply. Indeed, during my first NAIS conference after my appointment, I ran into a fellow new head who glumly shared, ‘I feel like I’ve taken over the Titanic *after* it hit the iceberg. (Lewis, 2017, p. 53)

Rob Evans (2009), the widely respected consultant to independent schools, agrees that “heads everywhere are concerned about potential declines in applications and increases in financial aid requests, and about the fate of capital campaigns and construction projects. The current situation is, as everyone keeps saying, unbelievable” (pp. 24, 26). The Great Recession of 2008 was one symptom among many that the technologies designed to make our lives better—specifically electronic networks connecting people and information via staggeringly fast computers—could lead to new and powerful forms of exploitation.

Prior to my work as a Head of School, I taught tenth and eleventh grade English. That experience preconditioned me to see the warning signs of dystopia, a genre my students seemed to enjoy during my decade with them in the classroom. We watched *The Matrix* and *V for Vendetta*, read *The Road* and *The Handmaid’s Tale*, talked at length about Ishmael Reed and William Gibson. As a classroom teacher at a 200-year-old college preparatory school with a 30-

year tenured larger-than-life Headmaster, I found their interest in the genre ironic. We discussed worlds falling apart and the conditions leading to their dysfunction. We explored fear's power to shape behavior. We assessed the mechanisms of social control, from propaganda to surveillance. We talked about uniforms and dress codes. Eventually and inevitably, a witty student in her navy blazer and school tie would observe, "I'm starting to feel like I am in someone's dystopian novel," a comment that led to some of our most important work, including the appraisal of technology that in real time was redefining their social and emotional lives.

The logic of dystopian literature forewarned me, but it had not forearmed me (Lapore, 2017). Once my first headship began in the summer of 2009, I anticipated that the fears related to economic uncertainty might create some problems. Yet, I could not anticipate the exact form they would take or what tools might thwart them. The independent school industry's leadership scrambled to offer support. The President of NAIS remarked:

These days, as comic relief from the daily diet of bad economic news, I find myself re-screening in my head Mel Brooks' *High Anxiety*...Steadiness, persistence, courage, focus, caring, and the optimism of unshakable beliefs—these are the values that will guide us as we weather the storm. (Bassett, 2009, p. 9)

To prevent what felt like an inevitable tip over dystopia's edge, it was necessary to remain true to those unshakable beliefs and offer an ethic of care to the families and students. Along with a healthy dose of optimism, heads of school would lead their academic communities through the economic downturn.

Ten years later, it now appears that heads of school needed not only to guide their communities through a storm, but also to reconfigure leadership dispositions and organizational structures to thrive in a world that never again would look like Frank Boyden's Deerfield

Academy. At the end of his tenure as the President of the NAIS, with more than 40 years' experience in the industry, Pat Bassett summarized the state of our union:

I believe that the third great transformational revolution in America—and, indeed the world—is upon us, enabled by the Internet and the new technologies that open up limitless possibilities for how we live and work, and most important, how we teach and learn... This third revolutionary game changer is made possible by the advent of the Internet, particularly by the democratized access to information and knowledge, and the ability of literally anyone to be a creator of information and knowledge... In particular, the increasingly networked world is changing much of what we know about teaching and learning, including how we define school. The MacArthur Foundation has identified five great shifts happening related to learning—all either made possible or accelerated by the Internet and inexpensive mobile devices to access it. The shifts are from *knowing* to *doing*, from *teacher-centered classes* to *student-centered learning*, from *the individual* to *the team*, from *consumption of information* to *the making of meaning*, and from *single-source knowledge* to *crowdsourcing*. (Bassett P. , 2013, pp. 10-11)

The NAIS Annual Conference in 2013, Bassett's final year as President, took place in Philadelphia and with his encouragement, thoughts of revolution circulated among independent school leaders at all levels. I wanted to join the cause, but it seemed that a concurrent upheaval gripped NAIS' constituents—the students, parents, teachers, alumni, and trustees—comprising our communities. It seemed that the schools were all primed for rebellion, but it was not clear against what.

It seems that this third great revolution in the United States requires skirmishes, if not full blown battles, on multiple fronts. At the exact moment when heads of school needed to embrace disruptive innovations, parents were doubtful, students unprecedentedly entitled, teachers resisted

change, alumni advocated tradition, and trustees navigated constant second guessing. Simultaneously, across the United States the gap between the richest and poorest widened (DePillis, 2017) and segregation in our nation's schools reached levels not seen since the 1960's (Richmond, 2012). Heads of school faced intense and unprecedented pressure from all sides. The independent school world historically "rewards risk-avoidance, clings to tradition, and too often bows to the desires of powerful constituencies" (Olverson, 2015, para. 24). Yet, in this moment school administrators could not avoid conflict because the momentary safety meant long-term peril. As networks connected constituents to each other and to all forms of information in unprecedented ways, heads of school found themselves "at the fault line of pundits, parents, teachers, staff, students, board members, researchers, consultants, and more" (Valentine, 2014, p. 21). They needed to "lead key constituents while weighing constituent expectations...negotiate the swirling eddies of economic uncertainty while investing in infrastructure and faculty development...weigh myriad opportunities, often technologically driven, while addressing the challenges, often technologically driven, that striate the field of education" (Valentine, 2014, p. 21). In short, heads of school had to lead at dystopia's edge and two trends in our industry—enrollment and affordability—suggested the matter was urgent.

As technologically-fueled dystopian characteristics including xenophobia, thought manipulation, surveillance, and paranoia permeated the cultural surround outside independent schools, a related hardship ravaged some of the campuses. "Private schools used to have an easier time filling seats when they had less competition. In 1995, private schools educated 14 percent of the nation's student population; they educated 11 percent in 2016, according to the census data" (Hobbs, 2017, para. 11). Moreover, over the past four years, 40 percent of NAIS member schools experienced moderate to high declines in enrollment. The third great transformational revolution

in America contributed to these enrollment opportunities and challenges. The internet offered parents constant access to endless expert opinions on raising children, fear-inducing blogs, alternative facts about the conditions of effective schooling, and sleek competitor school websites. Additionally, mobile technology created an instant-access culture, altering their perception of how quickly problems should be solved and how thoroughly the implemented solutions should be communicated back to the individuals involved and to the community at large. Technology, designed to make our lives better, did not come without complications. As *New York Times* bestselling author and beloved consultant to independent schools, Michael Thompson explains:

The climate and culture of independent schools have become palpably more fretful because a growing number of parents worry constantly about their children's prospects for the future and often question whether they are parenting in the right way. We are seeing a generation of dedicated, ambitious, loving, and wildly anxious parents turning to their children's school and its leader for guidance about children, as well as for reassurance about life in general...Ironically, while schools are generously devoting significant amounts of time to psychotherapy for parents, it also appears that it is harder today for school leaders to persuade parents to trust the school. For the head of school with enrollment problems, that is a fearsome reality. For heads of school with robust enrollment, it remains a festering sore. How do we get these super-anxious parents to trust us? It often falls to the head of school to personally manage the most troublesome parents. It is also the head who must authorize administrators to take time to train teachers in techniques for managing anxious adults. (Melvoin & Thompson, 2015, pp. 43-44)

Enrollment Change, 2013-2017

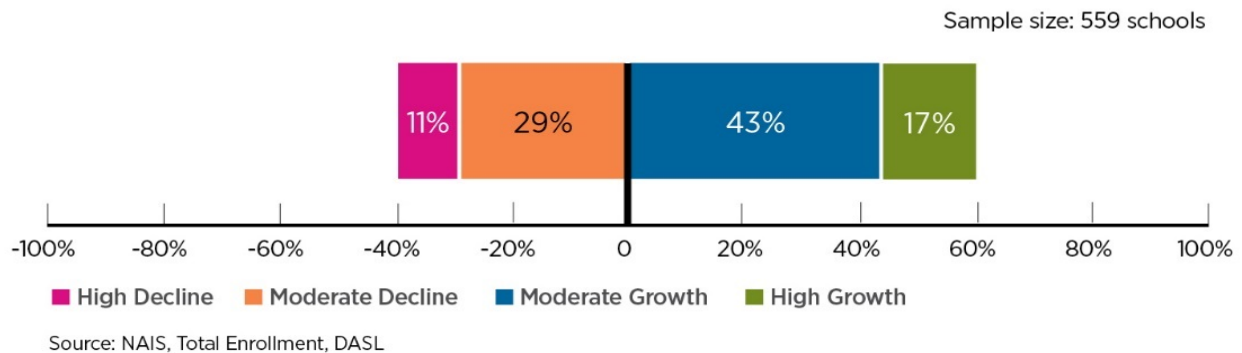


Figure 1. School enrollment changes from 2013-2017 based on NAIS-gathered data

While heightened xenophobia gripped the nation, some parents worried about how the needs of “other” children detrimentally influenced their children. As thought manipulation through social media created paranoia and generated distrust in our society, some disquieted parents viewed independent schools’ processes and perspectives with intense skepticism. As surveillance technology gave society increasingly sophisticated monitoring capabilities, the most anxious parents that I encountered transformed from *helicopters*—watching all aspects of their children’s lives, to *snowplows*—knocking would be obstacles out of their children’s path, to *drones*—obliterating said obstacles with cool mechanical precision.

Heads of school faced intense pressure from newly-networked consumerist parents, who too often used their children’s short-term happiness as the ultimate question for whether the educational experience was working. This mindset, I found, was both unsettling and antithetical to a quality education, where children grow and learn through experiencing frustration, disappointment, and even failure. Yet, as independent schools became more expensive, fewer families were willing to accept their children’s short-term disappointment as welcome news. Some busy parents feeling the preconditions for dystopia all around them, wondered why they should pay the 2015-2016 median independent school tuition of \$24,527 per year for their children to be

unhappy. Simultaneously, middle income families faced the prospect of one independent school tuition consuming 43 percent of their income—unsustainable conditions.

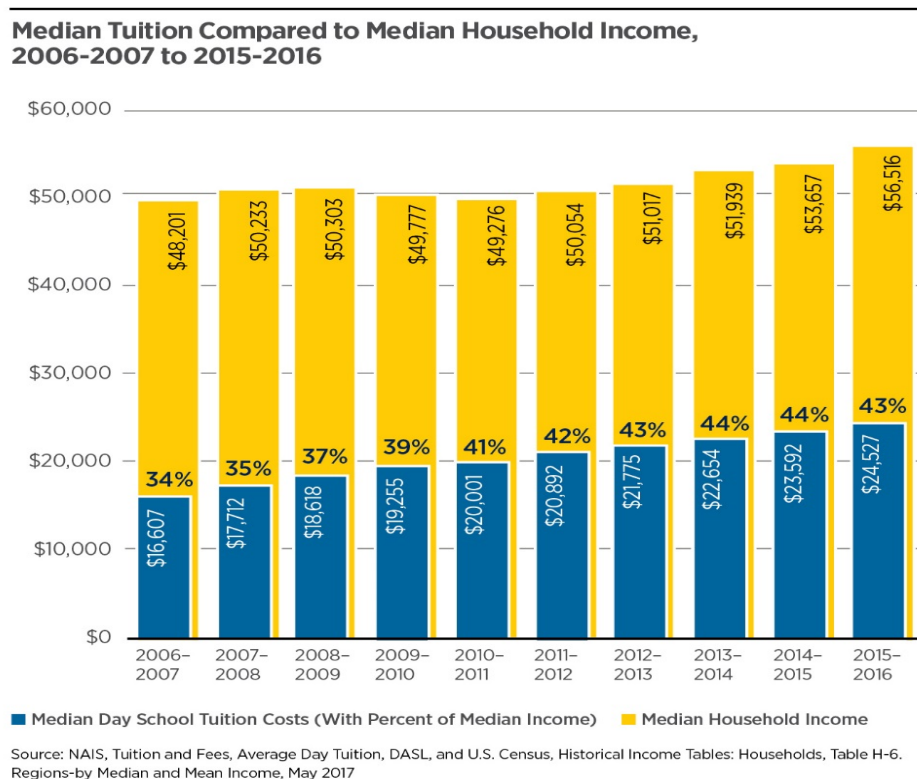


Figure 2. Median tuition costs compared to median household income from 2006 to 2016

These are the circumstances I faced entering my first headship at 36 years old, preparing for my school’s 200th anniversary celebration, following a legendary headmaster who did the job for 30 years and remained on as the school’s President for External Affairs, and having gone from the school’s intern to headmaster in just over a decade. The headmaster’s position proved to be ground zero for the revolution and I had little capacity to endure the experience. It brought me to my knees, stripping away all that was inessential, leaving me humbled and seeing the people around me as if for the very first time. It was instructive, and I am grateful to everyone involved. Searching for balance, I tried something different. At the Omega Institute in Rhinebeck, NY, early one morning after that first year, I walked into a small wooden house for a tai chi class. It was hot.

A lone figure moved at the front of the room before a wall of mirrors. He was ancient and dressed in flowing black clothes. He ignored my presence initially, then with a subtle gesture invited me to join him. I was his only student that morning.

“Have you done tai chi before?” He asked.

“No. This is my first time.”

“There is little that I can show you in the next hour that will matter,” he said. Then continued, “Except for this—don’t be concerned with your arms or hands. For now, you are in the ocean up to your chest. I want you to see the wave building. Prepare your feet, legs, and core as it moves towards you.” He modeled the posture for me—his feet at hip’s width, his knees soft, his posture straight.

“Now rise with the wave and allow your body to sink softly back as it passes.” He said not another word. For the next fifty minutes we rose and fell together in unison, allowing the waves to move us as they did. Four years later, as my first headship ended, and I prepared for my second, I read this advice from an independent school colleague in his article, “In the Maelstrom of American Independent Education”:

As a school leader, the forces moving toward you will crush you if you lock your legs. But if you first acknowledge that these forces exist, and then aim to use them to energize and steer your work, they will propel your teams into a healthy and interesting future.
(Valentine, 2014, p. 26)

The moment calls for a student-centered receptiveness where close attention to their needs and empathic care for their circumstances guides educator decision making. The forces moving towards heads of school and educators of all kinds can be filled with emotion and intensity. It’s

worth remembering that students must navigate similar technology fueled forces, a fact requiring considerable care and support.

Based on this logic, the general disposition of successful heads of school at dystopia's edge may not be so different from Frank Boyden's. In describing the underpinnings of Deerfield's success, Boyden explained, "People come here thinking we have some marvelous method. We just treat the boys as if we expect something of them, and we keep them busy. So many of our things simply exist. They're not theory. They're just living life" (McPhee, 1966, p. 21). Taking life as it comes and addressing issues as they arise with a sense that we are "just living life" marks a quaint starting point. Yet, the nature of the causes, circumstances, and consequences of the rising and falling requires careful attention to maintain piercing clarity on the school's mission in these changing times. As Thompson explains:

Of course, Boyden is long gone, along with that idealized, pastoral vision of the position of head of school. The men and women who lead schools today face challenges dramatically different from those of an earlier day, different even from just a decade ago...Today the school head's job is vastly different in scope, vastly busier, and far more intense than in any previous era. (Melvoin & Thompson, 2015, p. 40)

Many heads of school feel the preconditions for dystopia at levels ranging from the students' lived experience to the broader cultural and political climate surrounding schools.

Additionally, the endless barrage of information and misinformation places heads of school at risk for distraction, exhausting attention with alternatives that may not align with the school's mission. In general, networks have "radically transformed a head's communications and pace of work and life...The line of communication is wide open, 24/7, as the day's margins grow thinner, the pressures become greater" (Melvoin & Thompson, 2015, p. 42). Yet, relationship-based

leadership practices accounting for the conditions brought by networks offer possible relief to some threats faced at dystopia's edge. Most importantly, rethinking the way heads of school perceive and engage networked students matters because "the cultural currency of independent schools is relationship building" (Looney, 2009, p. 34). There is an opportunity for independent school leaders to redefine how they understand, engage, and inspire children in the age of networks.

Relationships are the core business of heads of school and most independent schools promise not only to develop their students' intellect, but to shape their character, to focus not only on what they know, but who they become. Many independent schools share the belief that, "In a world that has grown in complexity at what feels like an exponential rate, basic values and character become the most important foundation for future happiness and success" (Looney, 2009, p. 40). In the age of networks, heads of independent schools are called upon to honor the character development side of their missions by shaping who students become across multiple platforms, many of which are virtual but with real consequence. Heads of school may find an opportunity to turn productive the:

culture clash between the community of independent school—grounded in integrity, respect, and a vibrant intellectual life—and the culture students inhabit online and in gaming and social media, where cynicism, sexual exploitation, social cruelty, and a general shock-and-awe standard are often the coin of the realm. (Steiner-Adair, 2015, p. 34)

In short, guided by the shared fundamental conviction to develop students' character, independent schools stand at the leading edge of understanding, engaging, and inspiring children in the age of networks. Deep understanding of this smallest and most essential element of the business will have transferable value to every other part of independent school operations.

The rise of networks has changed the landscape of life and work at independent schools. The smallest unit of these sweeping changes begins at the very core of the education business—how educators and administrators perceive, understand, and connect with students. As Orth and Chen (2013) suggest:

Our children know more than we think they know, and less than they think they know. They are swimming in oceans of data, communications, and media. While we call members of this generation “digital natives”—those with the ability to consume, create, absorb, and navigate everything in the digital spectrum—in truth, our children are in danger of being overwhelmed by this 24/7 unfiltered digital world without our guidance. While we carefully oversee other areas of their lives, many of us are unintentionally negligent when it comes to their digital experiences. (p. 56)

I worry that the pressure heads of school face to “get technology right” shifts attention too far away from the broader strategic conversation about how technology has altered students’ ways of perceiving and connecting with their teachers and with each other. Beyond technology budgets and pedagogical implications, the informed focus on knowing students and understanding their networked lives can light the way for all offices within schools and the entire education sector.

Heads of independent schools share an opportunity to take the lead in this work. This means allowing for a heightened awareness of social changes and to shape the structure and purpose of leadership priorities. Following the standard business model of a focus on organization charts and work flow, this restructuring will feel like a departure from—or even a betrayal of—the legendary heads whose work defined the role of school heads. As Lopez and Stern (2010) explain:

The current model of headship reflects a very old tradition...Indeed, though tenure is generally shorter, the model of headship is not far off from John McPhee's 1966 portrayal of Frank Boyden, longtime headmaster of Deerfield Academy (MA) who was involved in just about every aspect of school life—leading with heart and dedication, but also running the place alone, with little support. (p. 88)

Although it is generally true that heads of school may benefit from fewer direct reports—the whole school reported to Mr. Boyden and despite what organization charts say, many independent schools retain at least a *de facto* rigid hierarchy—there remains a pastoral aspect of independent school leadership requiring heads of school to have a direct connection with every constituent. Independent schools form inimitable relationships with students and families and heads of school embody that connection. This proves to be so powerfully true that Bryon Hulsey, Headmaster at Woodberry Forest School, a boys boarding school in Virginia, explains to parents, “Our mission is to see that every boy is known, challenged, and loved” (“Discover Woodberry Forest: Our Community,” 2018). Woodberry Forest's tuition for the 2018-2019 school year is \$57,250. Yet, Hulsey chooses to focus not on the arms race of campus amenities, or SAT scores, or college placement promises. He makes one ambitious promise—your child will be known, loved, and challenged.

School leaders can pull back from dystopia's edge within schools today, equipping students with the habits of mind necessary to maintain dignity and thrive now and in their lives to follow. At its most fundamental level, the work begins with school leaders grounding their work in care ethics. Reflexive modernity's logic requires a point of reflection where leaders take seriously the obligation to assess the results of progress's experiment. Yet, I witness far too much commiserating over the circumstances associated with dystopia and far too little attention paid to

what students have to say about the complexity of their lives. This proves to be the passive allure of dystopian aesthetics. They offer cautionary tales of societal collapse, but they are not the resistance. As Lapore (2017) reminds us, dystopia

cannot imagine a better future, and it doesn't ask anyone to bother to make one. It nurses grievances and indulges resentments; it doesn't call for courage; it finds that cowardice suffices. It's only admonition is: Despair more. It appeals to both the left and the right, because, in the end, it requires so little by way of literary, political, or moral imagination, asking only that you enjoy the company of people whose fear of the future aligns comfortably with your own. Left or right, the radical pessimism of an unremitting dystopianism has itself contributed to the unravelling of the liberal state and the weakening of a commitment to political pluralism. (para. 18)

In this sense, school leadership at dystopia's edge not only cautions against the loss of our humanity through the manipulation or control of exploitive technology, it also suggests the proximity to a way of being that accepts atrocity so long as we are in the company of others who share our outrage over the atrocity.

Guided by missions to develop students' minds and character, independent schools stand perfectly positioned to understand, engage, and inspire networked students today, but they need help. The emerging research literature and evidence in schools suggest that students are lonely, anxious, and depressed in ways and to degrees without precedent. Courage, patience, persistence, grit, responsibility, kindness—these hard-earned attributes emerge in relation with others. Networks have altered those relations and that requires renewed attention. As a practicing head of school, I find myself personally aware of technology's collateral damage and concerned that my

own experience may not reflect the phenomenon. Consequently, my research framework blends modes of inquiry and perspectives on knowing.

3.0 Research Framework

3.1 Understanding with Their Lives on (the) Line: Research Questions Based in Practice and Refined by Theory

At two independent schools over the past two decades, I have taught, coached, lived among, and led children and adolescents during a transformative moment in human history. I observed with real-world urgency the procession of social networking technology and its impact on students' social, emotional, and academic lives. In their dormitories, I observed adolescents enraptured by the opportunity to connect with friends and simultaneously isolate themselves. I watched them spend countless hours crafting their online identity and developing tech-mediated relationships with friends and strangers. I witnessed fundamentally good adolescents damage their reputations by presenting images of themselves online that are inconsistent with their real-world standards. I listened repeatedly to their expressions of confusion or disbelief when challenged to consider the significance of their online behaviors. These students have disquieted me, leaving me searching for some line of inquiry and relevant theory to see the problem more fully, to know its multiple standpoints, and to identify leadership approaches to positively influence behavior in our newly networked world.

I have watched this progression with my students' lives on the line. In the early 2000's, I sensed something worrisome about an adolescent sitting for hours in an empty dorm room talking with friends or strangers online instead of cultivating relationships with the dozens of people across campus. I could not reconcile the paradox of their connected isolation. The dichotomy of physical versus virtual reality never quite encapsulated the problem. Yet, I was convinced then, and remain

so today, that human minds lack the conditioning to perceive the gap between symbolic exchange mediated by technology and lived un-mediated physical experience. I perceived in my students an inability to fully understand their individual and collective place within the sprawling and limitless system connecting them with each other and with all forms of information. I sensed from the start—as did so many others—that they were susceptible to new forms of manipulation and one simple click away from life-altering choices.

Most practically, I worried that their education, organized around Fordist logic and assumptions, had little in common structurally or substantially with their lived experience. I felt an opportunity and moral obligation to provide educational experiences that develop in them the habits of mind necessary to navigate their real-world lives enriched by virtual reality and entangled by networks. I felt a responsibility to cultivate essential skills enabling students to navigate the littoral zone of adolescence made increasingly complicated by social networking and other fast communication technologies. As John Dewey (1938) explains:

A primary responsibility of educators is that they not only be aware of the general principle of the shaping of actual experience by environing conditions, but that they also recognize in the concrete what surroundings are conducive to having experiences that lead to growth. Above all, they should know how to utilize the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worthwhile. (p. 41)

Students' current environing conditions stretch across electronic networks, influencing all points of their physical reality along the way. Imagine, for a moment, the world before mobile devices and social media. What physical changes to school buildings would allow students to constantly connect with each other, to have an ongoing exchange of pictures and messages just beyond their

teachers' awareness. Imagine the faculty meetings preceding the renovations and the professional development concurrent with the changes. The renovated building's design would be unrecognizable, certainly looking nothing like "school." Yet, this change has happened almost imperceptibly. To enhance the missions of independent schools, where *knowing* students remains vital to success, to extend independent schools' place at the leading edge of engaging and inspiring students, it is beneficial to spend a bit more time on the problem of what social media and technology have allowed—or forced—students to become and how those changes have affected schools' climate and culture.

Today, I am the head at an Independent School serving 300 children in preschool through eighth grade in the city of Pittsburgh, Pennsylvania. My perspective on supporting healthy personal and social development in children and adolescents relative to technology has shifted from reactive disorientation to proactive purpose. I have sat for considerable time with teachers and parents, struggling to help their children navigate the digital world. Their sentiments abound with contradictions about technology's impact on their children's lives. They appreciate how technology enhances connection with family *and* they worry about communication devices taking time away from face-to-face interactions. They value certain forms of independence that technology makes possible *and* they are troubled by how their children treat each other through devices. They appreciate their children's access to all forms of useful information *and* they worry about their children's exposure to inappropriate content. Their networked lives abound with tension-filled paradoxes affecting their identity development, habits of mind, and social relationships. I wonder if school leaders and curriculum specialists have done enough to prepare students with an ability to thrive within and across networks.

One guiding principle remains fundamental to all independent school missions—*know your students*. So, now that all those networks have bound us to each other, affecting our students and reconfiguring their experience with our schools in paradoxical ways, I have made sense of the phenomenon through a process of systematic inquiry seeking to answer four questions:

1. To what degree, in what ways, and to what effect have social media and mobile technology influenced students' connection and communication with each other, identity development, habits of mind, and academic experience?
2. What influence on their schools' climate and culture have Heads of PAIS (Pennsylvania Association of Independent Schools) member independent schools perceived emerging from their students' use of social media and mobile technology?
3. Out of a humanities orientation, what do films including *The Matrix* (1999) and *Ready Player One* (2018) suggest about the current lives of networked adolescents and the dystopian possibilities ahead? What aesthetic alternatives offer conceptual paths of replenishment for adolescents and new opportunities for school leaders?
4. How might a commitment to care ethics as a conceptual framework for school leaders in the age of networks help students navigate feelings of ambivalence and develop stronger school communities?

At the foundation of my research framework lies an evolving, experience-based sensibility taking shape throughout the past 20 years. This sensibility emerged at the start of my career as a teacher, dorm parent, and coach through disruptive events, made possible, intensified, or memorialized by networks and communication technology. My perceptions evolved during my Admissions Director days when I spent most of my time listening to families express their concerns and aspirations for their children. Finally, through two headships over the past 10 years, I have

been responsible for systems supporting the social, emotional, and cognitive development of children from preschool through 12th grade. I have processed these disruptive events and the day-to-day ins and outs of student life and school leadership while completing graduate level coursework in the *humanities*, focused on 20th century American literature and postmodern theories, and the *social sciences*, focused on social analysis of education.

Literature out of the humanities and research out of the social sciences shaped the meaning I made from the lives unfolding on my independent school campuses. Viewed retrospectively and comprehensively, the blend of practice, theory, and aesthetics led to this study's research questions. In a recursive process, these research questions emerged from and were answered by my own experience. I discovered that my basic assumptions had evolved considerably over time. What began as a search to understand what my students were doing online that complicated their real-world lives turned into a process to understand who they were becoming on both sides of the real / virtual divide only to watch the binary collapse under critical scrutiny. In other words, when social media and mobile technology initially disrupted their lives and our schools, I thought about what they were doing and the kind of trouble that activity created. I was putting out fires and doing arson investigations. Having watched the phenomenon for more than two decades, I am convinced that the more constructive questions involve the way technological infrastructure shapes their relationships and experience—not what they do online, but who they become. This evolved orientation reveals that there is no arsonist after all, only people caught up in systems where carefully laid tripwires trigger fires with the paradoxical capacity to create or destroy.

In more tangible terms, networks put their human development on overdrive and on public display. Emboldened by the bravery of being out of range, they could assume new dispositions, engage in forbidden conversations, make terrifying threats, and craft an idealized version of

themselves—at least for today. The adolescents I observed at the transformational expansion of networks were free from controls placed on their physical bodies and once they could carry their portal of liberation in their pocket, they would never return to those constraints. With unparalleled access to all forms of information, and through powerful new platforms to connect dynamically with others, students could assemble a more fluid identity with interchangeable pieces, a complex whole comprised of infinitely swappable and wildly heterogenous plug-and-play parts. As a head of school intuitively feeling that these changes affected my school's climate, I wondered how many of my peers also shared concerns over complications in our students' identity development, habits of mind, social experience, and emotional well-being. With no direct research offering a data-driven perspective on independent school heads' experience with the rise of social media and mobile technology, I turned to relevant theory for a better sense of future directions.

Deleuze's assemblage seemed like a reasonable place to start. In Deleuze's conception, assemblage "is a multiplicity which is made up of many heterogenous terms and which establishes liaisons, relations between them, across ages, sexes and reigns—different natures" (Deleuze, 1977, p. 52). Gifts, memes, emojis, pictures, captions, and status updates offer networked users across a variety of communication platforms heterogenous terms to establish relations. Deleuze continues:

there is no base or superstructure in an assemblage...one never does what one says, one never says what one does, although one is not lying, one is not deceiving nor being deceived, one is only assembling signs and bodies as heterogenous components of the same machine. (p. 53)

For my own purposes, I observed this *assembling* in all directions as several students on my boarding school campus struggled to stand out and fit in simultaneously. The concept offered a useful way of allowing the contradictions of adolescent lives stretched across networks to hang

together without any compulsion to obliterate the contradictions for my own comfort. Among all sensibilities, I held this to be true—the networked infrastructure underlying their social experience gave rise to a new responsibility disguised as a privilege for networked teens. World-altering technology companies created these devices, and they in turn shaped our students’ lives (Turkle, 2011), a reality uniquely complicated for teens easily manipulated by their devices’ darker magic.

Through my experience as a dormitory master, teacher, coach, and adviser literally living with students from 1997 through 2009—the exact timeframe when networks and mobile technology became ubiquitous—I concluded that my limitation in understanding and representing adolescent identity constructed concurrently in physical space and cyberspace was not a matter of how I proceeded to *know* the adolescents for whom I was responsible, but in the very nature of what mediating technology had allowed them to *become*. This is not to suggest that adolescents had fundamentally changed, or that problems associated with social networking represented an entirely new psychological phenomenon. Rather, I concluded that these new tools had given adolescents unprecedented power to assemble, disassemble, and reassemble their identities in ways that required fresh ways of knowing and engaging them.

3.2 From Emergence to Assemblage: A Methodology for Creating Outside the Lines

Inspired by the crisis of representation experienced in her own field work and in her work advising graduate students, Margaret Somerville’s “Postmodern Emergence” (2007), is a response to the limitations of empiricist research paradigms that promise precision and control. Through her methodology, she seeks to facilitate the emergence of alternative voices and new knowledges. Somerville extends the idea of identity as a process of merely becoming into an ontological

experience of emergence as becoming “other” in the field. This proves to be the natural extension of the observer effect—not only does our act of observing a phenomenon change that phenomenon, but also the process changes the observer. Through her field work, Somerville narrates the emergence of a new self that her experiences form.

Somerville’s postmodern emergence offers a useful opening logic for understanding how I make sense of adolescents making sense of their networked lives. Networks change our students and our observation of the collision of worlds made possible through networks changes us if we are receptive to their experience. The inevitable evolution of educators’ perspectives requires the provisional delay of detective work in favor of our exploration of worlds. But the idea of a natural “emergence” of a new self in networked students or adults does not go far enough.

The notion of emergence may be too natural for the artifice involved in a study where both the subject *and* object of research act or respond based on external logic imposed by social media platforms providing people with unprecedented access to each other through networks and powerful new tools to create and maintain personal and social identity. In this moment, the better question may not be: who is this “other” you are naturally becoming (emergence)? Rather: how are you artificially constructing a self at this moment (assemblage)?’ This second question extends Somerville’s methodology of postmodern emergence to a *methodology of postmodern assemblage* (Barnett, 2009).² Emergence may never have existed, and it may be possible to apply the notion

² In my early research for this dissertation, I published “Towards a Methodology of Postmodern Assemblage: Adolescent Identity in the Age of Social Networking,” in *Philosophical Studies in Education*. The article asserts that adolescents who occupy virtual spaces construct identities for a dual audience, those intimate friends whose favor they seek and a broader public audience whose purpose for viewing cannot be known. The digital world of MySpace, Facebook, and Instant Messaging has simultaneously complicated and enhanced the process of identity construction. The adolescent obligation to be noticed and coveted, coupled with the power and scope of social networking technology, positions the adolescent self as a product in a frenzied consumer culture. This paper seeks to construct a methodology for articulating the structure and norms of cyber-representations. This methodology of postmodern assemblage has the potential to generate meaningful, useful, and compelling ways of knowing adolescent identity. Insights gained through the assemblage

of assemblage to all forms of identity development across previous cultural moments. My use of the concept in this context fits the circumstance it seeks to describe. Social networking platforms have laid bare the *process* of identity formation in dramatic ways. In a cultural moment when the machinery of identity building is both ubiquitous and alluring, and when the compulsion and obligation to be noticed is more pressing than ever, a methodology of assemblage may be a suitable analytical tool for making sense of adolescent experience—the kind of work that will connect school life to larger societal and technological trends.

Conversations I have had with students over two decades demonstrate the value in seeing their identity formation as assemblage. Students' own assessment of their current lived experience reveals a unique type of artificiality or performance, where identities are always in flux, always assembled. This conversation comes from meetings with five young women who posted pictures and videos of themselves online that were given to administrators by parents from the school community concerned about the students' behavior. Two processes began—one disciplinary the other counseling. As a newcomer administrator, my task was to “figure out what is happening with these kids.” This interview transcript blends their responses for purposes of meaning and anonymity.

CB: I guess some of the parents who would do that [snoop on their kids MySpace pages] don't want their kids to feel pressured to do those things. You girls are well liked [...]. People look up to you [...] Do you think that people feel differently about posting pictures of themselves involved in illegal activities—like drinking underage—in light of all this trouble?

The Girls: I know that because of all that we have been through we are. We are. But I don't think like we think differently because like the way when we were punished the school like wanted us to realize it was wrong. I think the only way that like we think differently is that we don't want the school to address it or whatever. We don't think it's bad.

model will lead to curricular advancements that may contribute to the habits of mind and conscience necessary for maintaining personal dignity and avoiding the least desirable trappings of consumer culture.

CB: So it's not that you have changed your mind about whether it's right or wrong, but that you don't want to get in trouble.

The Girls: I know that if we are out anywhere before we take a picture I make sure that nobody has anything in their hand. I'll do stuff like that. But I know like, a lot of kids who are younger don't care as much. They say, 'Oh I'm cool, I'm drinking let's put it on there.' The younger it is. I don't know. That's just what I've seen.

CB: So when a younger student, say a ninth grader, is out at a party drinking and someone stops to take a picture. Do you think that's a moment that at some level they think, "This is good."

The Girls: I think everyone even if they didn't have a drink in their hand they would grab one and hold it up and be like, "Yeahhh."

CB: Why?

The Girls: I don't know. I guess they think that's cool. I remember seeing a girl's picture on MySpace. She is a younger student. It was a picture of just her and she had alcohol in her hand. I don't know what it was. But that was her main picture and she was young. Also, there are older people who do that. I don't know.

CB: Who does she want to be noticed by?

The Girls: Maybe older people—like guys. Or just to fit in to a group of girls in her grade.

The artificiality of self-depiction cuts at every narrative level. The older girls remove alcohol from the picture, while the younger girls position it prominently. Moreover, the girls' attitude about others in our community interested in their development, a perceived intrusion into their personal freedom, seems predictable. It is a natural adolescent response (stay out of my business) made complicated by technology. In other words, the insulating aspects of technology appear to facilitate greater distance between us rather than increased connections among us.

A methodology of postmodern assemblage begins by foregrounding the process by which people construct their identities. They are not their pictures. They are an assemblage far more complex than that and not entirely under their control. Nearly nine months after the first round of interviews in which one young woman said, "I wish adults would understand those pictures are not really us," I re-interviewed the original girls.

CB: Some say that part of being a person is that we all have different sides of ourselves. What do you think of that? I remember one of you saying, “I wish adults would understand that those pictures are not really us.”

The Girls: It’s not the big picture. Everyone just sees the bad and sticks to it. They don’t say, “Oh this person also did this and all this other stuff [...] It’s not really us being us. It’s us being funny, goofy, or whatever. [...] The thing that really bothered us: we’ve gone to this school for so long and you know, that’s not really who we are. Everyone who saw those pictures said, “I can’t believe you are like this. They didn’t take time to look back and see everything else.”

A methodology of postmodern assemblage has the potential to account for contradictory identities associated with a single individual who constructs his or her identity across networks, through multiple platforms, and embodied eventually in the real world. To account for this complexity, research in the form of postmodern assemblage might proceed with conceptual awareness of layers shaping adolescent identity as artifice:³

The Girls: People say in high school you are figuring out who you are and stuff like that but I don’t think it’s right. I think you are creating, I don’t think you figure out who you are. I guess I don’t want to go unnoticed. Like my parents and stuff are just in Wheeling and I don’t know...I don’t want to be like that. I never really thought about it.

CB: What do you mean by creating identity?

The Girls: You learn from certain things. You create yourself. You are not a certain person looking for who you are deep down. I mean I think that we all create our personalities and everyone changes.

CB: Is that an active process?

The Girls: It’s always changing with everything you learn.

CB: Is it like building? Constructing? Assembling?

The Girls: I never really thought about it. Different experiences change you. Building upon your personality. You hear all the different stories that happen good and bad and you make decisions

³ A theory-based mashup of the experience account for the discarding of used (boring) incarnations of the self; the frenzy of choosing the alternatives that will be desirable by the market (Instagram, Snapchat, etc.); the spaces of creation, commoditization, and marketing; the alterations, additions, deletions of materials; the schizophrenic gaps between older versions of the self, the embodied self as exhausted signified, the virtual self as invented fiction, the process of each bleeding into the other; the rejection of the new forms and the procession of simulations through ever new and imaginative recombinations of found materials.

about what to do...There are so many different things that make you who you are. Your personality isn't uniform. There are many things that describe you and go outside the lines.

CB: How does technology fit into that?

The Girls: It just shows you more. Pictures in a photo album give you a chance to put pictures online to see your personality, to see who you are...When you think about building and going outside the lines. You can go outside the lines.

My students' subtle shift to the second person, "It's always changing with everything you learn," reflects something more significant than cavalier adolescent pronoun usage. The girls turned the table and predicted that educators, too, would change. Heads of school, deans, and the research community, as they navigated those first complications brought by networks, had little sense of what was happening. It is as if educators were the cyborg hosts of HBO's *Westworld*, looking at a photograph of something they were not programmed to understand: "it doesn't look like anything to me." In that moment, my students told me: *you* can go outside the lines.

A methodology of postmodern assemblage begins with an ontological orientation towards problem solving and understanding—a move just outside the traditional lines. This starting point has the potential to generate meaningful, useful, and compelling ways of understanding networked adolescents. Educators have an opportunity to think with students about their choices and the infrastructure conditioning those choices. We can create learning experiences that help students think critically about *going outside the lines*: A commitment to engaged listening practice clears the way for educators to approach students not with solutions based in virtue ethics, but questions based in care ethics: who creates those lines? How do we know they exist? Who are we inside of them and outside of them? Why is there a distinction between inside and outside? How much room for choice is there on either side of the line? What forces compel people to make those choices in the first place? Who do those choices visibly help or harm? Who do those choices affect beyond our field of view? How would a concerned person design the system differently?

What priorities would guide your redesign? A focus on hearing and understanding students' description of their lived experience at all levels may contribute to curricular advancements that shape new habits of mind and conscience necessary for maintaining personal dignity and avoiding the least desirable trappings of networked lives. That ambition bracketed, empathetic listening practices may lessen some of the anxiety and loneliness many students experience.

For this project, I am assembling stories from students and school, film and fiction, sociological and educational research, and the endless barrage of media about adolescents and technology. I am telling these stories to support school leaders interested in evangelizing the vision for relationship-based innovations in school communities, to lay the groundwork for possible pathways out of exhausted dystopia to replenished communities. This groundwork begins with an ethic of care where attentive listening practices give rise to new ontologies for school leaders making sense of students' networked lives. In engagement with real world practices, independent school educators demonstrate daily the ontologies I have in mind as they listen closely to children and coach them on their social and emotional experience. When I observe from a distance children and their teachers on my school's playground, I see the foundational beginning of life's most important skills including: how to include others, how to join others at play, how to resolve differences, how to share, how to take turns, and how to stop when asked. I observe teachers masterfully decide when to intervene and when to stay back, allowing children to navigate the issue among themselves. Our students' digital playground, on the other hand, provides far less adult access, understanding, and coaching. Knowing educators will likely not coach adolescents online in real time the way they do on playgrounds, it may be helpful to develop alternative ways to perceive, engage, and support them. The section to follow offers a broad theoretical framework, developed from descriptive poetics of postmodernist fiction, for perceiving networked teens.

3.3 From Epistemology to Ontology: Theorizing Networked Teens

This study's research framework, purpose, and scope begin with two decades of experience closely watching children and adolescents adapt to communication networks and tools shaping their lives, analyzed through perspectives from the humanities and social sciences. The emerging story fascinates me. But this is not exactly how it has happened; nothing has emerged. Rather, I have chosen memorable moments from my experience and overlaid those episodes onto the perspectives of similar phenomenon shared by many of my head of school colleagues across PAIS. I have assembled the story with heightened attention to certain aspects of students' networked lives. It would be a stretch to say that I have biased my way of understanding networked adolescents by reading Thomas Pynchon. But it is safe to say that Oedipa Maas, his intrepid searcher in *The Crying of Lot 49* (1966), and the critics who appraise her, have influenced my approach.

To be more precise—my research methodology for this study draws inspiration not only from how Oedipa makes sense of her world, but in how I have made sense of Oedipa making sense of her world and how literary scholars have made sense of Oedipa making sense of her world. Pynchon's magic trick in *The Crying in Lot 49* begins, as all great tricks do, with a setup. Oedipa Maas accepts the call to sort out the estate of her deceased lover Pierce Inverarity. The vastness and complexity of his estate leaves her confused, moving aimlessly at times from one clue to the next to understand his various business holdings and interests. Oedipa's search for the truth feels familiar enough. And then the magic happens. Late one night, Oedipa serendipitously wanders into a bar where she notices the drawing of a muted post horn on the latrine wall, which may relate to an underground communication network known to users as the W.A.S.T.E. system. This system, in turn, may relate to a mysterious group called the Trystero, which may have a connection

to Pierce's estate. The reader's epistemological distress mirrors Oedipa's—does the muted post horn symbolize the Trystero? Does it exist? Making the matter more complex, the reader grapples with Oedipa's reliability in the first place. Epistemological exhaustion fuels the trick at every level—an apparent detective story littered with clues leading to something unknown and never disclosed that the reader has reason to doubt from the start. Through it all, Oedipa wonders if:

at the end of this (if it were supposed to end), she too might not be left with only compiled memories of clues, announcements, intimations, but never the central truth itself, which must somehow each time be too bright for her memory to hold; which must always blaze out, destroying its own message irreversibly, leaving an overexposed blank when the ordinary world comes back? (Pynchon, 1966, p.95)

And that's the trick—a character's exhausted search for truth gives way to the recognition that without an understanding of the world's rules and boundaries, reality may be nothing more than an error in perception. Oedipa begins her journey to see what she might find out; she stays with it for the world she may build and what she might become in that space just perceptibly out of reach. Or does she?

In her memo book, under the symbol she had copied off the latrine wall, Oedipa wrote, "Shall I project a world" (Pynchon, 1966, p.82). As her journey flickers from a search for truth to a construction of worlds, the reader also must grapple with the rules of engagement at the diegetic level of the novel. Is Oedipa's series of discoveries the uncovering of a vast conspiracy or do all those signs and symbols signify only the absence of an actual referent? The novel challenges its readers to decide which questions warrant our primary attention and yield the most useful interpretations. I have found myself challenged similarly in understanding and representing how adolescents make sense of their networked lives. Captivated by the power of networks, our

students engage in online behaviors they struggle at times to explain. The reader may provisionally hold the possibility that they enter social networks for what they might find out about others and they stay for what the networks compel them to become. In times of trouble, their flickering search for meaning and ephemeral identity constructions do not easily submit to standard lines of administrative inquiry.

As a current head of school and researcher constructing useful stories about how to make sense of, represent, and ultimately support networked adolescents, the critical reception history of *The Crying of Lot 49* helps form my logic of inquiry. Like Oedipa, some of my students struggle to bridge the gap between appearance and reality. They question the authenticity and sincerity of status updates across sprawling communication networks. They experience technologically magnified paranoia, knowing the possibility of intrusion into their password protected worlds. They drift through a system rigged to manipulate their choices, leaving them occasionally to conclude, “I don’t know why I did what I did.” I find myself wondering about my students, just as Oedipa’s critics wondered about her—how reliable a witness are they to their own condition? How do they make sense of another world’s intrusion into this one? How do they function when the rules of one world do not apply in another? Who do they become on either side of the boundary? These questions begin to matter much more than the initial appeal for what they might find out about others online, or what we might find out about what they have done and how we know it. I am suggesting that the critical tools and analytical methods associated with literary research in general, and to Oedipa Maas’s journey in *The Crying of Lot 49* in particular, influence the assumptions I carry to situations where networks complicate adolescent lives.⁴

⁴ For a full summary of the novel’s reception history and its influence on my way of perceiving networked adolescents, see Appendix B.

In the early 2000's school leaders struggled to understand how to support or hold accountable students whose choices outside of school, amplified through social media, should be dealt with inside of school. Back at their inception, networks provided new pathways of promise and peril. The administrative team I worked with at the time did our level best—using old tools to solve new problems, playing the role of detectives when it may have been necessary to be explorers of new worlds. We asked, “who did it and how do we know?” rather than “who are they and what is this world?” Simply stated, we read the situation using the wrong genre's rules and conventions. While we scanned through virtual space with our Sherlockian magnifying glasses, hoping to discover who knows what, the young people entrusted to our care were crossing unguided into frontiers that none of us had the capacity to comprehend. We were all modernist readers assuming the task of sorting out modernist stories. But these were not modernist stories at all. Before the reader's eyes, their stories tipped and required from us a new logic of inquiry. To help make meaning of their circumstances and support them vexing paradoxes, we needed to ask better questions.

In *Postmodernist Fiction*, Brian McHale (1987) suggests that the primary difference between modernist and postmodernist fiction is a change in the dominant. Building off Roman Jakobson's 1935 lecture, McHale explains, the dominant:

specifies the order in which different aspects are to be attended to, so that, although it would be perfectly possible to interrogate a postmodernist text about its epistemological implications, it is more urgent to interrogate it about its ontological implications. In postmodernist texts, in other words, epistemology is backgrounded, as the price for foregrounding ontology. (p. 11)

In McHale's reading, modernist fiction has an epistemological dominant, "that is, modernist fiction deploys strategies which engage and foreground questions such as...What is there to be known? Who knows it? How do they know it? What are the limits of knowledge?" (p. 9). In my experience sorting through disciplinary issues at schools prior to the age of networks, these epistemological questions were primary and relevant as a useful starting place. Events unfolded in linear time and physical space. The challenge was to "get to the bottom of" what we knew and how we knew it." Heads of school were detectives and their work often felt like classic "who done it" narrative.

Then the world changed. As adolescent experience unfolded simultaneously in real and virtual spaces, a new set of questions gained traction, the same set of questions McHale ascribes to postmodernist fiction:

the dominant of postmodernist fiction is ontological. That is, postmodernist fiction deploys strategies which engage and foreground questions [including] Which world is this? What is a world? What kinds of world are there? How are they constituted? What happens when different kinds of worlds are placed in confrontation, or when boundaries between worlds are violated? (p. 10)

What happens when different kinds of worlds confront one another, or when boundaries between worlds become violated? Frontier exploring had eclipsed the days of sleuthing and before asking what adolescents have done when their lives become complicated by technology, it is necessary to understand who they are becoming and what identities they are consciously or accidentally creating. To be sure, both sets of questions matter, but in the age of networks, ontological questions take priority and lead to more constructive lines of epistemologically-oriented inquiry. In other words, students may benefit most from educators approaching them with an ethic of care to receive and empathize with the ambivalence inherent in their online being. School leaders may

find mutually beneficial the practice of exploring with students what they are going through online to more fully understand the complexity and to model the process of extending care to others, valuing their humanity and elevating their worth. To support students who may be grappling with invisible online drama, educators might shift their grounding from virtue ethics focused on an appraisal of right and wrong to care ethics focused on being with and understanding the student experience. Through this ethic of care, educators may help them feel less lonely and anxious in the complex conditions of their lives on and offline.

Yet, in terms of this project's research framework, my provisional conclusion initially left me wondering if the theoretical value of an ontological focus on being and an ethic of care resonates with other heads of school. Two fundamentally important questions remained to be answered: do my provisional concerns about the influence of social media and mobile technology on adolescents and our schools' climate and culture resonate with other heads of school? And, are heads of school putting into practice strategies for understanding and supporting students that move beyond the virtue ethics of "digital citizenship" towards the care ethics of digital humanitarianism?

3.4 Do You See What I See? The Survey of PAIS Heads as Jailbreak From Solipsism

There is a great deal of research on how social media and mobile technology affect children and adolescents. Dozens of studies offer insight into the phenomenon from a range of perspectives and include not only professional insight, but also the self-perception of teens. There is considerably less research about the perception of school leaders on the effect social media and mobile technology have had on their schools' culture and climate. The most comprehensive study

in this category comes from *Education Week's Research Center*. In February 2018, just four months prior to my survey of PAIS Heads of School, the *Education Week Research Center* fielded an online survey to a representative sample of more than 500 school leaders, including principals, assistant principals, and deans. While my survey focused exclusively on head of school perceptions of the effect social media and mobile technology have had on their students' lives across a range of issues and the associated impact on school climate and culture, the *Education Week Research Center's* study, "School Leaders and Technology: Results from a National Survey," "focused on screen-time, personalized learning, social media, cyber-bullying, media literacy, and the Computer Science Movement" (Kurtz, Loyd, Harwin, & Osher, 2018, p. 5). The *Education Week* study enhances my data with information across a broader group of school leaders and into a few overlapping areas of interest. Among the most relevant findings include:

- More than half of school leaders (55 percent) are extremely concerned about student social media use outside of school.
- Just under half of school leaders (45 percent) are extremely concerned about cyber-bullying.

The *Education Week* survey and the original survey used in this study seek to gather school leader perspectives on technology and education and conclude that, "school leaders face multiple challenges as they educate children in an increasingly technology-focused world" (Kurtz, Loyd, Harwin, & Osher, 2018, p. 5). While the *Education Week* study focused on the degree to which leaders are concerned about a range of high-level technology-oriented issues, my study focuses more conceptually on how technology creates paradoxes in our students' lives and how those complications affect our ways of understanding, engaging, and inspiring them.

In independent schools, where knowing and caring for our students is the most fundamental promise of our work, identifying how social media and mobile technology have affected our schools feels significant if we are to fully deliver on our missions in the digital age. The goal of my independent survey is to understand:

- 1) If social media and/or mobile technology have affected school culture and climate in these areas:
 - a. Peer to peer communication
 - b. Identity complications and violations of personal privacy
 - c. Habits of mind
 - d. Information discernment and academic development
- 2) If heads of school are developing programs and guidelines to help students and parents navigate these challenges.

Confronted with evidence that may reveal the existence of a bona fide conspiracy in her world, but beset by doubt that it could all just be in her head, Oedipa wonders in *The Crying of Lot 49*, “Shall I project a world?” (p.64). Through this interpretivist study, I reached a similar point. Having used my own experience to generate and answer my research questions, I wondered to what degree I might also be projecting a world. Alternatively, have others seen what I have seen?

3.4.1 Survey Design and Analytical Methods

I designed a survey to generate descriptive statistics providing generalizations of how current heads of PAIS member schools are experiencing the ways in which social media and mobile technology are affecting their students and their schools’ climate and culture. At the most fundamental level, I wanted to know if heads of school believe the impact of social media and

mobile technology on their students and on their schools' climate and culture is positive or negative. From that beginning, I drew on my experience working with students, research literature out of the social sciences, and theoretical perspectives from the social sciences and humanities to develop four categories of possible concern: peer to peer communication, identity complications and violations of personal privacy, habits of mind, and information discernment and academic development. I listed six probable challenges under each category. My experience and existing research led me to believe that heads of school would likely identify most of the challenges presented in each category as troubling or concerning. Given the possibility of little variation in that type of response, I asked instead how frequently, if at all, heads of school observed each of the challenges. I acknowledge that my assembled categories of concern and specific behaviors under each category do not represent a complete list of possible challenges facing Heads of School. However, those categories reflect the most common issues addressed in the research literature and are significant from my professional experience.

In addition to asking heads of school how frequently they observed each of the six challenges under each of the four categories, I also asked whether the challenges presented in each category generally felt like familiar problems made worse by technology or new problems requiring new solutions. Finally, I wanted to know if heads of school believed that any of these problems lay outside the purview of schools. Enhancing and adding substance to the quantitative descriptive statistics, I also provided heads of school with open-ended questions inviting them to share additional observations related to each of the four categories. I analyzed the qualitative data by tending first to the presence or absence of ontological concerns expressed in their responses. Using the Qualtrics interface, I read the free responses looking for words related to being and identity and evidence of care ethics underlying their perception and approach. Additionally, I

observed in the qualitative data the simultaneous emergence and reinforcement of several paradoxes, made possible by networks, complicating our students' lives.

With sufficient questions uncovering the head of schools' perspective on the frequency of four types of challenges in their students' lives, I wanted to understand how independent school administrative teams worked through routine disciplinary issues involving mobile devices and social media. I designed the questions to assess the existence of an ontological turn and possible commitment to care ethics in administrative practice. My experience and the research literature--both theoretical and behavioral—suggest value in administrators and teachers tending first to what social media and mobile technology compel our students to do or cause them to become, then exploring with them how their devices manipulated their behavior (both ontological concerns), then sorting out who did what and how we know (epistemological concerns). Building off this basic appraisal of what administrative teams do in response to network-based problems, I wanted to know what type of educational initiatives heads of school would consider supporting, or already have in place, to counteract challenges associated with social media and mobile technology in their schools.

3.4.2 Population and Sampling

I distributed this survey to all heads at the 110 PAIS member schools. Thirty-six respondents began the process and 29 completed the survey. These heads of school oversee education from pre-kindergarten through twelfth grade programs, they lead coed and single sex schools, and their tenure varies from those in their first five years to those who have served for 20 years or more.

My dissertation advisor approved the population of heads at PAIS member schools and I notified the chair of PAIS's board of directors, of which I am a member, and the organization's executive director prior to distributing the survey. I conducted the survey through the University of Pittsburgh's Qualtrics platform. I contacted the participants via an introductory email and two reminder emails. The survey instructions assured the participants of both confidentiality and anonymity, which I offered to encourage participants to answer each survey item truthfully.

How many years have you been head of school?

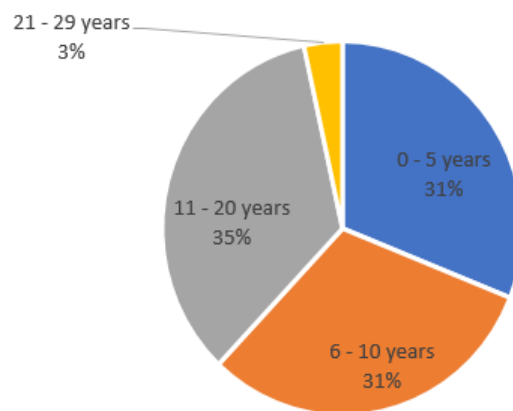


Figure 3. Years of service of PAIS school heads

3.4.3 Limitations of Survey

I am not a detached, objective observer of events. The scramble to create useful frameworks to help school leaders know, engage, and inspire students in the digital age carries great consequence for many of us running independent schools today. Through the research process, I actively engaged in an intersubjective and intrasubjective process of interpreting the meaning of my survey data, assessing disruptive events retrospectively in my students' lives, synthesizing the conclusions of existing research, and drawing on aesthetics to conceptualize

possible paths forward. My position within the system I am seeking to describe eliminates the possibility of objectivity. While I accept the idea that I am blind to some of the edges of the phenomenon—for example what the broader educational universe outside of independent school leaders might think about this study’s value—I do occupy a standpoint where daily I see how social media and mobile technology influence students at my school. As a member of the population under analysis, I have a clearly defined perspective on the phenomenon I seek to understand.

Some may also identify my sample size as a limitation. While I am interested in whether the results of the survey hold up in other regions of the country and with additional participants, I used the original survey in this study to determine if my theory and practice-based assumptions about the influence of social media and mobile technology matters to other heads of school. Future studies with larger sample sizes may assess whether school type (religious or secular, progressive or traditional, single sex or coeducation), head of school gender, head of school age, or region of the country influence perspectives on the degree to which people see or worry about challenges related to social media and technology. This study’s sample size does not warrant, nor did I hope to reach, statistically reliable conclusions about those correlations.

Regarding the survey results from the 29 heads of school who completed the survey, it is possible that my collegial relationship with some of those heads of school might have influenced their responses. In other words, heads of school might offer responses that feel helpful to the study’s overall purpose in a particular direction. Additionally, while identities of individual respondents are not presented, some heads might have felt compelled to answer questions in ways that their school communities or boards of trustees would respect. Finally, while I wrote each item in the survey creating room for participants to accept or reject the issue based on their own experience, the nature of the questions themselves may create a cumulative effect where

participants begin *projecting worlds of their own*, overlaying onto their existing reality new sensibilities about what's happening with their students and schools. In short, I am treating heads of school as part of the assemblage.

In the broadest sense, I conducted this survey to get at something narrowly defined—namely, if heads of school in my immediate area (the state of Pennsylvania) shared my concerns about a series of challenges facing their students and schools. The short answer is they do. Ultimately, I hope this study offers insight from the field, a head of school's perspective on the effect social media and mobile technology have on our schools and some conceptual ways of mapping the opportunities ahead. As with most issues, the best suggestions on how to proceed come from our students—namely those I interviewed over a decade ago. Back in the middle 2000's, when YouTube was barely in its infancy, that group of hard-working and thoughtful students at my school posted a video and a few pictures that shocked several members of the school community.

As mentioned in the previous section, along with others on the administrative team, I concluded that there was something wrong with the girls. I supported a series of sanctions. Nearly a year after the initial occurrence, the girls offered a glimpse at the problem's nature. Of the administrative team's reaction, they observed, "They didn't take time to look back and see everything else." The possibility of maintaining dignity for all existed if we had taken time to look back and see everything else, notably their complete social media experience and its complicated relationship with their real world lives. The girls further explained that technology, "shows you more...you can go outside the lines." At the time I remember distinctly thinking that my students were helping me understand their experience. All these years later, I can see that they were inviting me to think differently about my own experience. In its form and purpose, this study is an answer

to their call—my own attempt to go outside traditional research lines, assessing the system from within, so that as school leaders we can help our students thrive today and build more humane technology in the future.

3.5 Assembling Useful Stories: Blending Perspectives in Meaning Making

Through my professional experience observing and supporting students whose social and emotional struggles were intensified by technology, I sensed from the start that it would be useful to get a “grasp of the very nature of the thing,” (van Manen, 1990, p.177). Two entangled interests captured my attention. I wanted to more conceptually understand my students experience—what they were going through as networks introduced paradoxes and new forms of ambivalence into their lives. I also wanted to more fully understand what I was going through—my own experience of understanding and supporting students grappling with an experience I did not fully understand. These interconnected “abiding concerns” (van Manen, 1990, p. 31), led me to focus on the “texts” of lived experience, theirs and mine. Bracketing my own perspective from the matter not only felt impossible, it felt counter to my sense that some of my study’s value emerged from the deep standpoint I was afforded. The interpretive process mattered and my humanities orientation, focused on narrative aesthetics, contributed to a blending of hermeneutical phenomenology (van Manen, 1990) with narrative inquiry (Chase, 2005). This blended approach to inquiry elevates the importance of both an understanding of the essence of an experience *and* the exploration of the lives of individuals involved in or representing the phenomenon.

By “narrative” I have in mind three interconnected layers. First, narrative aesthetics in the form of novels and films serve as primary representations of the phenomenon. *The Crying of Lot*

49 (Pynchon, 1966), *Ready Player One* (Spielberg, 2018), and *The Matrix* (Wachowski, 1999) all metaphorically illuminate some aspect of the phenomena I hoped to more fully understand. Second, narrative technique describes the mode of inquiry. Several methods associated with narrative analysis guide the ways I interpret not only the aesthetic representations of the phenomenon, but also the real-world experiences of interest. Finally, narrative representation characterizes the importance of the ways in which I assemble and portray the phenomena and their intersections. In summary, “narrative” inquiry describes not only the “texts” of interest and the mode of analysis (Chase, 2005), but also the form I use to present the research.

The streams of relevant data in this study include my first-hand experience as an active head of school (autoethnography), the composite perspective of my head of school colleagues (phenomenology), the research literature across a range of disciplines (literature review), contemporary film and literature (aesthetics), and current news and events (cultural studies). The stories in this study, functioning as primary data, are for me the best way to illustrate an emerging and complicated aspect of the human experience that I hoped to understand more clearly. To this end, I agree with Richardson:

if we wish to understand the deepest and most universal human experiences, if we wish our work to be faithful to the lived experiences of people, if we wish for a union between poetics and science, if we wish to reach a variety of readers, or if we wish to use our privileges and skills to empower the people we study, then we need to *foreground*, not suppress, the narrative within the human sciences. (Richardson, 1990, p. 133-4)

Some may argue that the merging of these research paradigms presents epistemological incompatibility or cannot pass the scientific standards of rigor. At this moment in my appraisal of the emerging phenomena, I think the notion of paradox, ambivalence, and incompatibility are

fundamental to the essence of the experience. Therefore, I have chosen a mode of inquiry and representation that elevates these tensions as an aspect of the condition rather than imposing on them forced coherence.

In rationalizing the logic of inquiry for her autoethnographic study, “‘There are Survivors’: Telling A Story of Sudden Death,” Ellis (1993) references the idea that, “All autobiographic memory is true. It is up to the interpreter to discover in which sense, where, and for which purpose” (p. 725). The distinction feels useful for Ellis’s purposes because in her study she functions reflexively as the narrator and main character, an approach that Jackson refers to as “radical empiricism” (Jackson, 1989) where we make ourselves experimental subjects and treat ourselves as primary data. To this end, Ellis wonders about her study:

is what I describe here a partial account of the way this event “actually” happened? Or have my written words now taken on a reality greater than the event so that I cannot separate them from emotional recall or cognitive memory of what occurred? (1993, p. 726)

I suspect I could ask the same questions about a few of the stories presented in this study as primary data and the way I bend a novelesque prose style towards more scientific purposes. However, coordinated with the empirical data from the survey of PAIS heads of school, that form of narrative inquiry brings a vibrant and personal dimension to otherwise objective data.

4.0 Our Students

“You have to understand, most of these people are not ready to be unplugged. And many of them are so inured, so hopelessly dependent on the system, that they will fight to protect it.”

(Wachowski, *The Matrix*, 1999)

4.1 I Don’t Know Why I Did That: Adolescent Experience in the Age of Networks

A decade ago, in the summer of 2008, a concerned mother of a seventh-grade girl visited my office. Her daughter had been friends with a group of four other girls. Together, they formed a clique with significant social power. Recently, however, Candice had been outcast for a few fashion choices that did not meet her group’s standards. MySpace blogs filled with comments about Candice’s lack of fashion sense. Beth, the most popular and manipulative girl in the group, decided to digitally remove Candice from a group picture long-age posted on her MySpace page. An emblem of the clique’s disposition, the original, unedited, picture once sent a message to the world—you *know you want to be us*. In Beth’s alteration of that picture, she had cut Candice right out of existence. Gossip about clothing and cutting someone out of a picture can be cruel, but the behavior carries more profound implications when the spectacle is persistently public for all to witness. The mother handed me a copy of the MySpace blog:

June 10: *liz* “Bahahahahahaha YOU CROPPED CANDICE OUT

June 10: *Libby?!?* “LMFAO! She didn’t deserve to be in this picture / lmfao / I love you guys tons

June 10: *liz?!?* “wow, I love uss”

June 11: *summer08 baby!!* “ERIN YOU ARE SO FREAKING PRETTY”

June 15: *Meg* “This is really cute!”

In this moment, an adolescent’s personal torment became a perpetual public shaming. As her mother explained, “It feels like Candice has no control of who she is...She has to live with whatever these girls put up about her.” Ten years later, and now made possible by even more sophisticated social networking platforms, stories like this go on repeating themselves as fiercely as if they had never happened before.

During this period, the reach of networks and power of communication devices have grown exponentially. Yet, there has been no commensurate rise in the creation and refinement of comprehensive educational initiatives aimed at helping children and adolescents to understand networking technology’s influence on their personal and social identity (Cyr, Berman, & Smith, 2014). People scramble to make sense of their virtual utterances as they struggle to understand who they are on the other side of the screen. This confusion carries potentially catastrophic risks. For example, in the days following the mass shooting at Marjory Stoneman Douglas High School in Parkland, Florida, a female student stopped Chris Tennyson, the principal of Fulton High School, and handed him her phone. “On it were screenshots of Snapchat messages sent that morning from a former student. ‘I’m locked, loaded, and ready to go,’ one message read. ‘People will be hurt, hell maybe even killed. I won’t stop’” (Bosman, 2018, para.3). The school went into lockdown within three minutes. The threat proved to be empty. A recent breakup with the student receiving the Snapchat message may have prompted the threat. The investigating

Lieutenant noted, “he knew what he did was wrong. He did not have a great explanation for what he did” (Bosman, 2018, para. 26). Broken hearts are nothing new and adolescent angst has fueled legendarily bad behavior long before Snapchat. Yet, today that angst has many new paths to follow with amplified consequences—welcome to breakups in the age of networks.

Theorists from Baudrillard⁵ (1981) to Haraway (1990) have anticipated and narrated humanity’s terminal identity, “an unmistakably double articulation in which we find both the end of the subject and a new subjectivity constructed at the computer” (Bukatman, 1993, p.8), where terminal refers both to an end (the termination of our subjectivity disconnected from the computer) and a beginning (a new self-born at the computer terminal). Hyperconnected through technological prosthetics, contemporary adolescents occupy a subject position that extends beyond the body into simulated territories. This passing from spaces once defined by the real/virtual binary but conceived more precisely here as movement across the seamless fractal locations of a self constructed across networks, requires educational researchers and contemporary practitioners to reconceptualize the ways of knowing and representing adolescent experience and identity as real and virtual spaces concurrently create it.

Adolescents who occupy virtual spaces construct social media identities for a dual audience, those intimate friends whose favor they seek and a broader public audience whose purpose for viewing cannot be known (Bortree, 2005). The digital world of Facebook, Instagram, YouTube, and Snapchat has simultaneously complicated and enhanced our students’ personal and social sense of self. The adolescent obligation to attract attention and be coveted, coupled with

⁵ The slippery seduction of this new age of tech-driven identity construction lies in the procession of identity constructs, allowing an individual to never settle on a state of being. The prospect of the illusion (or disembodied virtual avatar) effacing the slant referent—the body—proves troublesome and alluring on a host of levels. Baudrillard’s procession of simulacra where the referent effaces the original offers a useful starting point for understanding identity constructions in virtual space.

the power and scope of social networking technology, positions the adolescent self as a product in a frenzied consumer culture. Complications at all levels arising from this new ontology present school leaders with a new opportunity to think about how we understand and engage students. I believe the present moment calls for an ethic of care in school leadership, bringing attentive listening and empathetic engagement, processes improving leaders' awareness of the students' experience and modeling relational ethics desperately needed in online discourse.

I suspect leaders at all kinds of schools throughout the past two decades have supported adolescents in varying degrees of real-world crisis accelerated by virtual networks. There is a gap between their "real" self—the students educators observe in classrooms and athletic fields—and the virtual representations of that self. During the initial stretch of the experience, my colleagues and I thought about how their virtual self can be so different from their real self. The online self, it seemed, extended but stood separate from the real self. Yet, as their real lives became increasingly entangled by networks, any notion of duality became irrelevant. In her afterword to *Beyond Cyberpunk*, Sherryll Vint (2010) affirms the point because "our lives are constituted by the interpenetration of virtual and material worlds and the only way to retake the universe is to move beyond the binary of simulated/real toward a more dialectical understanding" (p. 230). The apparent gaps between their real-world and tech-mediated behaviors were less symptomatic of a metaphoric twenty-first century schizophrenia and more playfulness—engaging experiences made possible by entangling networks. These were not patients in need of treatment, or deviants requiring quarantine. Networks had made possible a new mode of being where participants curated their own and others' personal brand in real time.

Through this period of transformation, I worried most about the confusion they expressed in the context of manipulative forces they could not detect or explain. Easy to use, yet remarkably

sophisticated communication platforms—from Instagram to Snapchat—created a new kind of matrix, one they entered seemingly by choice, but that seduced them in ways that defied resistance. During the 2013-2014 school year, my last as the headmaster at a traditional college preparatory school, almost every disciplinary issue I faced involved a mobile device. In all cases, it was clear that the device did not cause the chaos, but it did accelerate and memorialize it. Most strikingly, a seemingly endless run of adolescents replied nearly identically when confronted with their destructive choices—"I have no idea why I did that...it's not really like *me*." As Žižek explains in *The Sublime Object of Ideology*, "The most elementary definition of ideology is probably the well-known phrase from Marx's *Capital*: 'Sie wissen das nicht, aber sie tun es'—'*they do not know it, but they are doing it*'" (Žizek, 1994, p. 312). Remarkably adaptive, interactive, and manipulative communication platforms kept students plugged in and acting according to the machine's expectations. Making matters worse, students' schooling had done little to help them navigate their envioning conditions and—speaking for myself—the adults in their lives had only a dim notion of how to perceive and understand them. A clear need existed to more fully understand their experience.

From the phenomenon's beginning, previous research suggests that for adolescents the technology provides an efficient and harmless way to stay connected with friends (Walker, 2000). For others, the benefits of social networking are complicated by misuses contributing to feelings of depression and loneliness (Caplan, 2003). Some adolescents demonstrate an "ethic of care" in their online behaviors, while others assert themselves and ask direct questions that may cause conflict or show reckless disregard for other people (Stern, 2007). Still others use the internet as an electronic confessional, revealing sexual behaviors, preferences, and desires (Grisso & Weiss, 2005). This "Online Disinhibition Effect" intensifies when people lack the visual and auditory

cues essential for understanding another person in conversation. The absence may contribute to a breakdown in civility (Suler, 2010).

Although research across a host of disciplines reveals a wide range of online behaviors and associated consequences, scholars have given considerable attention to how technology affects the formation and presentation of personal identity. Often relying on Goffman (1959) as a foundational source, this body of research pays critical attention to the presentation of self as a performance within a context of accepted social conventions. The unique nature of the internet as a virtual place with shifting expectations of conduct across various platforms renders identity formation and presentation in that environment an unstable affair. Walker's research establishes the simplest version of the argument: "enthusiasts of the Internet insist that it provides a place where individuals can interact without traditional barriers. Critics believe that the Internet's version of selfhood and community is a pale ghost of traditional forms of community and identity" (Walker, 2000, p. 112). In short, research into online adolescent behavior presents a mixed bag—communication technology can both support and hinder identity development, but networks unquestionably shape children's values, attitudes, and behaviors in ways that are fundamentally different from previous generations (Osit, 2008).

Although lessons from *The Matrix* suggest that the desert of the real is preferable over even the most seductive simulation, research concerning identity development and technology offers no clear directive. At the origin of the phenomenon two decades ago, Cerulo (1997) argued that computer mediated interactions and identities are impersonal, ingenuous, and fleeting, whereas Walker (2000) rejected the notion that virtual identity constructions are "illusory, deceptive, and without a 'core'" (p. 113). Far too pragmatic to enter the *mediated experience is valuable* debate, other groups of researchers began assessing the real-world consequence of online behaviors.

Harman and Hansen (2005) discovered that children reporting high faking behaviors online (lying about personal identity) had lower self-esteem, higher social anxiety, poorer social skills, and higher aggression than the group of children reporting minimal faking behaviors. Additionally, Bargh, McKenna, and Fitzsimons (2002) found that people are more likely to reveal their “true selves” to new acquaintances met over the internet than to individuals met face-to-face.

In general, there is some evidence that the online environment is a place where one can create false and extreme identities that may not be healthy, nor helpful, in resolving real life identity issues (Morgan & Korobov, 2012). The body of research analyzing adolescents’ online behaviors and their associated consequences demonstrates paradox at every level. In this *Alice in Wonderland* world, faking is real and may contribute to an actual body in crisis. Interactions may be simultaneously deeply personal and profoundly illusory, as people share their “true self” to virtual strangers. In the paradoxical statement inspiring this project, an outstanding student worthy of compassion and respect said of a picture posted on social media of her involved in some troubling behavior—“I wish adults at this school would understand that those pictures are not really us.” This wish is complex and may be at odds with Walker’s belief that the internet deepens and substantiates identity. She explains:

the technology behind the Internet, through this system of hyperlinks, invites people to represent themselves through relational categories. The creators of home pages can place themselves inside a vast web of information in a manner that is not readily available in casual face-to-face interaction. Although the Internet is sometimes characterized as isolating, it offers new methods of creating and displaying networks and communities. This goes against the expectation that the Internet creates an unanchored and shifting sense of self. (Walker, 2000, p. 104)

The binary logic establishing the real self as authentic and the virtual self as artifice has proven to be only marginally helpful to the adolescents that educators are seeking to understand. Modernist assumptions, suggesting an obligation to help adolescents repair the fragmentation of their technologically-oriented lives, seem equally unproductive.

We live in a consumer society where even our identities are commodities to be bought and sold. As Zygmunt Bauman (2007) explains:

In the liquid modern society of consumers no identities are gifts at birth, none is “given” let alone given once and for all in a secure fashion. Identities are projects: tasks yet to be undertaken, diligently performed and seen through to infinitely remote completion...consumers are driven by the need to “commoditize” themselves. (p. 110)

The adolescents whose struggles at the dawn of the age of networks inspire this study have been trained in the art of our confessional society, where going unnoticed may be the greatest offense. Their social media pages and YouTube videos illustrate one of Bauman’s (2007) central points about our time. Namely that, “Beneath the dream of fame, another dream, a dream of no longer dissolving and staying dissolved in the grey, faceless and insipid mass of commodities, a dream of turning into a notable, noticed, and coveted commodity, a talked-about commodity...a commodity impossible to overlook” (p.13). Those pictures are not “us” because in their ceaseless quest to be noticed, their identities must never be permanent and must be separable from their physical bodies. As the leaders of their communities, independent school heads share an opportunity to model constructive and empathetic relationships with students whose social media presence and virtual utterances tug at and complicate their embodied experience.⁶ Before feeling fully prepared to

⁶ Derrida’s *Difference* may be particularly useful as researchers theorize and explore adolescent identity assemblage. As Derrida explains, “The signified concept is never present in itself, in an adequate presence that would refer only to itself. Every concept is necessarily and essentially inscribed in a chain or system, within which it refers to another and to

listen to their experience, I hoped to have a better sense of what technologists, those creating their devices, sought to achieve through the innovations and if they anticipated or perceived the collateral damage I witnessed.

4.2 Arming the Rebellion: Reclaiming Attention and Recovering Self-Awareness

One group of adults operating remotely in their lives understood adolescents' needs, desires, and insecurities remarkably well. Software developers and engineers across Silicon Valley and beyond knew exactly why the children using their products behaved the way they did because they built the infrastructure giving rise to the behaviors. It was unsettling and encouraging that a:

group of Silicon Valley technologists who were early employees at Facebook and Google, alarmed over the ill effects of social networks and smartphones, are banding together to challenge the companies they helped build. The cohort is creating a union of concerned experts called the Center for Humane Technology. (Bowles, 2018, para. 1)

The world-class team leading the charge is comprised of former tech insiders and CEO's who intimately understand the culture, design techniques, and organizational structures allowing technology to hijack society. They explain, "what began as a race to monetize our attention is now eroding the pillars of our society: mental health, democracy, social relationships, and our children" (Harris, 2018, para. 1).

other concepts, by the systematic play of differences" (392). The self constructed via prosthesis (keyboard, mouse) using reproductive technologies (digital camera, voice) is a unique production only loosely associated with something like a 'real' referent. Ultimately, it relates within the ontological space of other selves in the same plane—even to the manifestations of the same self under erasure but still existing as a glossy mirage or echo, an earlier self (Derrida, 1982).

The Center for Humane Technology (2018) reveals that there is an invisible problem affecting all of society and that what we feel as addiction is part of something much bigger:

Facebook, Twitter, Instagram, and Google have produced amazing products that have benefitted the world enormously. But these companies are also caught in a zero-sum race for our finite attention, which they need to make money. Constantly forced to outperform their competitors, they must use increasingly persuasive techniques to keep us glued. They point AI-driven news feeds, content, and notifications at our minds, continually learning how to hook us more deeply—from our own behavior. (para. 12/15)

These humanistic patriots, rebels who once dedicated their time and talent to constructing the empire and its ubiquitous control, now admit that the products they helped to build are not neutral. They are part of a system designed to addict users and their tactics for controlling minds are not best for personal well-being. Specifically, the Center for Humane Technology believes that Snapchat turns conversations into streaks, redefining how children measure friendship. Instagram glorifies the picture-perfect life, eroding self-worth. Facebook segregates people into echo chambers, fragmenting communities. YouTube autoplays the next video within seconds, even if it eats into people's sleep. I wondered how many of my colleagues across the independent school world believe that the Center for Humane Technology's concerns are valid. I wondered if there is evidence in schools of the claim that social media and mobile devices have changed students' habits of mind—from their attention spans, to their need for online "likes," to their face to face communication skills. My experience suggests that their concerns are valid and there is reason for alarm. Not *Armageddon*, send-Bruce-Willis-into-the-asteroid-to-save-the-planet alarm, but concern. As a generalization, the hard-coded rules of engagement shaping their tech-mediated

lives now shape their unmediated interpersonal relationships, a fact complicating the most fundamental promise independent schools make—that our students will be *known*.

In my work with children and their parents, I observe a kind of perverse irony. Their technology's addictive qualities render them nearly helpless to shut down the device. Yet, they often lack the sustained attention, patience, and empathy required to navigate un-mediated interpersonal challenges throughout their school day. In other words, they try to power down the difficult conversations that bring depth to our lived experience away from the screen, while they seem to have endless capacity for vicarious experience on the screen. In their overview of “The Problem,” the rebels at the Center for Humane Technology draw attention to four primary problems associated with the tools they helped build:

- Mental Health—the race to keep us on screen 24/7 makes it harder to disconnect, increasing stress, anxiety, and reducing sleep.
- Our Children—the race to keep children's attention trains them to replace their self-worth with likes, encourages comparison with others, and creates the constant illusion of missing out.
- Social Relationships—The race for attention forces social media to prefer virtual interactions and rewards (likes, shares) on screen over face-to-face community.
- Democracy—Social media rewards outrage, false facts, and filter bubbles which are better at capturing attention and divides people so that there is no longer an objective truth (para. 3)

The humanistic patriots at the Center for Humane Technology believe that their products have reshaped our lives for the worse and there is little chance they will change on their own.

These attention-extraction companies including YouTube, Facebook, Snapchat, and Twitter will not change without cyberpunk-edged resistance because it is in their business model to keep people gazing doe-eyed at their screens. These former business insiders acknowledge that Facebook would lose revenue if they blocked advertisers from micro-targeting lies and conspiracies to the most persuadable people. They explain that Twitter's stock price would fall if they were to remove the millions of bots on their platform, which academics estimate at 15 percent of their user base. Additionally, they admit that Facebook would lose revenue if their tools did not allow advertisers to automatically test millions of variations of content—word choices, color, images—to capture the most minds. Most troublingly, the Center sees the current call to reshape technology as significantly more urgent than Luddite moments in our past.

In the final portion of their overview of “The Problem,” the center explains that while people always worry that new technology will harm society, four distinct forces make today different from anything in the past, including television, radio, and computers:

- Artificially Intelligent—No other media drew on massive supercomputers to predict what it could show to *perfectly* keep you scrolling, swiping, and sharing.
- 24/7 Influence—No other media steered two billion people's thoughts 24/7—checking 150 times per day—from the moment we wake up until we fall asleep.
- Social Control—No other media redefined the terms of our social lives: self-esteem, when we believe we are missing out, and the perception that others agree with us.
- Personalized—No other media used a precise, personalized profile of everything we have said, shared, clicked, and watched to influence our behavior at this scale. (para. 6).

In summary—attention-extracting companies using the most powerful computers on the planet have hijacked people's minds and society. Through people's mobile devices, these companies

have altered their social and emotional lives in ways that keep them plugged in and the tech industry has a business interest in compelling them to stay connected. To that end, they have created products that draw people in even deeper with every mediated interaction. Society has reached a point of reflexive modernity, a moment of reflection when people bear witness to the unintended consequences of digital networks, including the devices and platforms seductively meshing people together.

Out of the tech industry, the Center for Humane Technology leads the charge. The Co-Founder and Executive Director of the Center for Humane Technology said:

In the future, we will look back at today as a turning point towards humane design; when we moved away from technology that extracts attention and erodes society, towards technology that protects our minds and replenishes society...To design humane technology we need to start by deeply understanding ourselves. (Harris, 2018, para. 11/22)

Tristan Harris believes that to design humane technology, people need to start by deeply understanding themselves. Guided by their own self-awareness, educators may more fully see their students. Yet, tending to this micro-level of work needs to happen deliberately, fully aware of what the research literature says about students' networked lives and the trends recognized in schools.

In his recent interview with Thomas Friedman, "What's Next for Humanity: Automation, New Morality and a 'Global Useless Class,'" Yuval Noah Harari, the Israeli historian and author, offers a startling portrait of society's near future. He predicts that within the next twenty years artificial intelligence and automation will create a "global useless class," technology will be a new tool for discrimination—not against groups but individuals, and new technologies will hijack democracy and even our sense of self. *"I don't know why I did that"* in the present moment for

networked teens carries local risk, but the absence of self-awareness for young adults with the developmental capacity to assess their choices has foundational implications for the world Harari predicts. He explains:

Liberal democracy trusts in the feelings of human beings, and that worked as long as nobody could understand your feelings better than yourself—or your mother. But if there is an algorithm that understands you better than your mother and you don’t even understand that this is happening, then liberal democracy will become an emotional puppet show. (de Freytas-Tamura, 2018, para. 7)

Self-awareness in the context of networks feels like a useful starting point if there is hope to demystify social media’s influence—perhaps control—in people’s lives. The feeling of missing out because lives are not picture perfect, the outrage over posts that exploit emotions and vulnerabilities, the pressure to be always on and available, these experiences exist because of networks and educators grounded in care ethics as a listening practice will empathetically hear and supportively respond to their students’ increasing anxiety and confusion.

Following NAIS’s leadership, independent schools have recontextualized their missions for twenty-first century success. Guided by those missions, educators are discovering their respective places along the continuum of those “big shifts” in education. They are constructing learning experiences relevant to students’ lives today and meaningful in the world they will one day shape. They are paying close attention to groundbreaking cognitive science helping to understand how students think and feel. With that wonderful momentum underway, this project seeks to support even more foundational steps forward. With increased clarity into leadership opportunities helping students thrive in this acute moment of reflexive modernity, educators can more effectively create conditions helping students feel less lonely, anxious, and sad. Through the

manifest and latent curriculum in schools, grounded in care ethics, educators may help students think inside and outside the platforms and applications shaping their relationships, so they may be less susceptible to those systems' silent manipulation. As Ramo (2016) explains:

to see both real and virtual at once, to see the way they blend and pull at each other, does demand a new sensibility. And though, eventually, this new instinct will be commonplace, for now at least it must be defined, studied, and learned by each of us. (p. 28)

Through world-changing communication devices, children and adolescents find their real lives complicated by their experience in virtual space. The adults in their lives placed in their hands the most powerful communication devices ever invented and the unintended collateral damage has been significant. Yet, this awareness may prove to be the relationship-based starting point that empowers independent schools to recontextualize and recalibrate what they have always done best. As in all other areas of school life—what is good for children overall is also what is best for business. The stakes are high.

4.2.1 Searching for the Master Key

Although adolescents may lack the critical tools to fully understand and articulate the detrimental influence social media and fast communication technology have in their lives, they know what the outcome looks like and are fascinated by it. For nearly the entire fall of 2017, the Netflix program, *13 Reasons Why*, was the most watched television show, according to the Internet Movie Database (IMDB). On its surface, the series appears to be about Hannah Baker's suicide and the 13 people who contributed to her fatal decision. Hannah explains:

The way I see it, there are two different kinds of death. If you're lucky, you live a long life and one day your body stops working and it's over. But if you're not lucky, you die a little

bit until you realize it's too late. I know some of you might think there was more I could have done or should have done. But I'd lost control and in that moment, it felt like I was already dead. (Yorkey, 2017)

Hannah Baker died because the digital representations of her identity, passed through networks, subsumed her embodied self—the happy-go-lucky daughter of loving, although struggling, parents. The first death came from Justin Foley who shared through his social network a picture of Hannah from their evening date at a park. The image, revealing Hannah's underwear, went viral and the power of networks, more than her own emotional vulnerability, led to the embodied Hannah's effacement and ultimate replacement by the picture that came to define her.

If *13 Reasons Why* demonstrates the power of networks to complicate a person's social and emotional well-being, the opening scene foregrounds the limitations school officials have in accessing and understanding the phenomenon. The series' opening scene depicts Mr. Porter, the school's counselor, attempting to open Hannah's locker for her parents. Covered in Hannah's pictures, the locker serves as a temporary memorial. Mr. Porter's failed attempt at the combination and his frustration prompts Hannah's father to ask, "Isn't there a master key?" Mr. Porter responds, "There used to be." The key to creating useful stories about *13 Reasons Why* emerges with the absence of a master key in the opening scene. The implication feels clear enough: school leaders once had a reasonably solid grasp on the forces shaping and complicating our students' lives. In the age of networks, that key no longer works, and the best educators can do at present is fumble around with individual combinations to gain access to students' experiences. Educational theorists and practitioners need not only curricular advancements that shape habits of mind and conscience necessary for maintaining personal dignity and avoiding the least desirable trappings of lives lived within and across networks, but then also need new master keys to gain access to the

phenomenon in the first place. As the head of an independent school, I worry that some constituents may expect, or my colleagues may feel pressured to offer, a master key in the traditional form—virtue wisdom spoken compellingly and revealing the head of school’s acumen. I believe the master key in this moment involves not speaking with insight, but listening with empathy. From my perspective, this is not a pathway to the master key. This is the master key in the form of an ethically grounded practice.

As their lives now unfold simultaneously in virtual and real space, adolescent identity has become increasingly complicated. A new set of questions require attention as educators help students navigate their experience: Who am I? Who am I becoming? Which world is this? What is a world? What kinds of worlds are there? How are they constituted? What happens when different kinds of worlds confront one another, or when boundaries between worlds are violated? These classic ontological questions have become immediate and necessary. Adults gave students world-altering technology—very cool devices that have extracted their attention and altered their emotional landscape. It feels something like Prospero’s gift of language to Caliban in Shakespeare’s *The Tempest*. The half-human creature eventually rebukes his master, “You taught me language, and my profit on’t / Is I know how to curse. The red plague rid you / For learning me your language!” (Shakespeare, 1610/2004, I.ii. 366–368). School leaders and curriculum specialists share an opportunity to prevent children from becoming Calibans of the digital age one day remarking, “You plugged me into networks, and my profit on it is my mind has been hijacked,” a critique they would struggle even to make since it is nearly impossible to question the logic of the system giving rise to your being in the first place. To seize the opportunity to know students and help them navigate the technology fueled paradoxes contributing to their distress, independent school leaders will benefit from a commitment to being in relation with students as they navigate

their increasingly complex lives on and off the screen. Guided by care ethics, school leaders listening attentively to students' experience may detect early signs of their distress, to see the difference, metaphorically speaking, between those students who are waving and those who are drowning.

4.3 Both Waving and Drowning: Perceiving Networked Adolescents

James A. Garfield defined the ideal college as “Mark Hopkins on one end of a log and a student on the other” (Smallwood, 2002, para. 1). It’s difficult to know how Hopkins, who was the President of Williams College from 1836-1872, might have inspired Garfield if their communication had been mediated by mobile devices upon a virtual log. I suspect that Hopkins might start with an appraisal of the conditions making their connection possible. He might account for his own biases and assumptions. As a theologian, he might recall 1 Corinthians 13:12, “For now we see only a reflection as in a mirror; then we shall see face to face.” Having laid bare his own projections about the tools facilitating the connection, he may eventually see past the coded structures shaping their relationship to find his way to Garfield, listening to his experience within and beyond the screen at once. Aware that much of his student’s life happens in virtual reality, he may feel compassion for Garfield’s burden, disguised as a privilege, to craft an online identity using the best tactics of digitally-savvy marketers. He may observe his student, writing himself into virtual existence and curating the image with anticipation of what the broader public will like. He may hope to cultivate Garfield’s deeper sense of self-worth while by exploring with him his talents and how they may be used for good in the world. Drawing his attention back to the actual body on the other side of the virtual log, he might find ways to honor the complexity of an identity

constructed in virtual and real spaces simultaneously. He may understand and engage Garfield ultimately face-to-face, and through that connection be remembered forever as the ideal illustration of the importance of relationships in education.

Who are these students on the other side of the log? The popular media has recently paid considerable attention to the post 9-11 generation, the group that moved into the newly wired dorm that shortly thereafter went wireless, the group that has always been plugged in. In her article, “Teen Depression and Anxiety: Why the Kids Are Not Alright,” Schrobsdorff (2016) explains that this generation has never known, “a time when terrorism and school shootings weren’t the norm. They grew up watching their parents weather a severe recession, and, perhaps most important, they hit puberty at a time when technology and social media were transforming society” (para. 8). The cultural conditions contextualizing this generation’s experience concerns Schrobsdorff:

In 2015, about 3 million teens aged 12 to 17 had had at least one major depressive episode in the past year, according to the Department of Health and Human Services. More than 2 million report experiencing depression that impairs their daily function. About 30 percent of girls and 20 percent of boys—totaling 6.3 million teens---have had an anxiety disorder, according to data from the National Institute of Mental Health. (para. 5)

Schrobsdorff concludes that although adolescents have always faced stress, the climate in which teens navigate this stage of their development today has changed and neither they nor the adults in their lives know exactly how best to proceed. The new instinct required to effectively navigate this line, to thrive in a networked world, will one day be commonplace, but until then students need support making sense of the experience.

Students’ social and emotional lives today have been complicated by a series of paradoxes associated with social media and mobile technology. Theirs is a world of increased

interconnectivity *and* pervasive isolation, always-on access to friends *and* a broader audience for gossip, pressure to stand out *and* an obligation to fit in, a hub for group camaraderie *and* the public shame of exclusion. Collectively, these paradoxes have led this generation to some significant social changes. Twenge explains, “The number of teens who get together with their friends nearly every day dropped by more than 40 percent from 2000 to 2015” (Twenge, 2017, para. 21). Students are more likely to report feelings of loneliness and exclusion in dramatically increased numbers. The data confirms exactly what worried me as the students in my dormitory back in the early 2000’s stopped socializing in the day room. On the surface, many of the students enjoyed and preferred playing video games or connecting with friends online, but the lack of shared physical camaraderie contributed to feelings of being left out, a trend especially notable among girls:

Forty-eight percent more girls said they often felt left out in 2015 than in 2010, compared with 27 percent more boys. Girls use social media more often, giving them additional opportunities to feel excluded and lonely when they see their friends or classmates getting together without them. Social media levy a psychic tax on the teen doing the posting as well, as she anxiously awaits the affirmation of comments and likes...Girls have also borne the brunt of the rise in depressive symptoms among today’s teens. Boys’ depressive symptoms increased by 21 percent from 2012 to 2015, while girls’ increased by 50 percent—more than twice as much. (Twenge, 2017, para. 33)

Twenge reports that teens’ feelings of loneliness spiked in 2013 and have remained high ever since. Additionally, she notes that eighth graders who are “heavy users of social media increase their risk of depression by 27 percent, while those who play sports, go to religious services, or even do their homework more than the average teen cut their risk significantly” (Twenge, 2017, para. 30). As

school leaders think strategically about the pace of change and essential innovations, these data warrant considerable attention. Students need help navigating their social and emotional lives.

With these statistics in mind, it is worth asking: what do teens say they are doing online and how do they feel the experience affects people their age? The Pew Research Center's study, "Teens, Social Media, & Technology 2018," offers the main takeaway that:

YouTube, Instagram, and Snapchat are the most popular online platforms among teens. Fully 95 percent of teens have access to a smartphone (which represents a 22-percentage point increase from the 73 percent of teens who said this in 2014-2015), and 45 percent say they are online 'almost constantly (up from 24 percent who said this in the 2014-2015 survey)'" while another 44 percent report they are online "several times a day. (Anderson & Jiang, May 2018, para. 20)

All told, 89 percent of teens are online at least several times a day. Students' preferred social media platforms have shifted considerably over the past several years with fewer teens overall using Facebook. Today, regardless of their demographic characteristics, students prefer YouTube, Instagram, and Snapchat. For school leaders interested in the underpinnings of student populations divided along socio-economic lines, a notable exception warrants mention, "lower-income teens...are far more likely than those from higher income households to say Facebook is the online platform they use most often (22 percent vs. 4 percent)" (Anderson & Jiang, May 2018, para. 6). This contributes to the likelihood that social media may not promote the blending of children from diverse socio-economic backgrounds. Additionally, preferences for certain social media platforms may reinforce gender divisions—girls are more likely than boys to use Snapchat and boys are most likely to identify YouTube as their platform of choice. Finally, racial segregation across social media platforms may reinforce divisions within school buildings. White teens are more likely to

use Snapchat than Hispanic or black teens and black teens are more likely to prefer Facebook (2018). Learning that de facto segregation among social media platforms may be invisibly contributing to divisiveness within communities may dishearten heads of school faced with inclusiveness challenges.

Among the findings in this study that feel most compelling to me is the congruence between the effect that teens perceive social media having on people their age and the perceived effect that heads of school perceive social media having on teens and their school communities. For both teens and heads of school, there is no clear consensus about social media's effects. According to the Pew findings, "Minorities of teens describe that effect as mostly positive (31 percent) or mostly negative (24 percent), but the largest share (45 percent) says that effect has been neither positive nor negative" (Anderson & Jiang, May 2018, para. 3). The largest share of heads of school (40 percent) perceive neither a positive nor negative effect, while minorities of heads of school identify a mostly positive (28 percent) or mostly negative (32 percent) effect

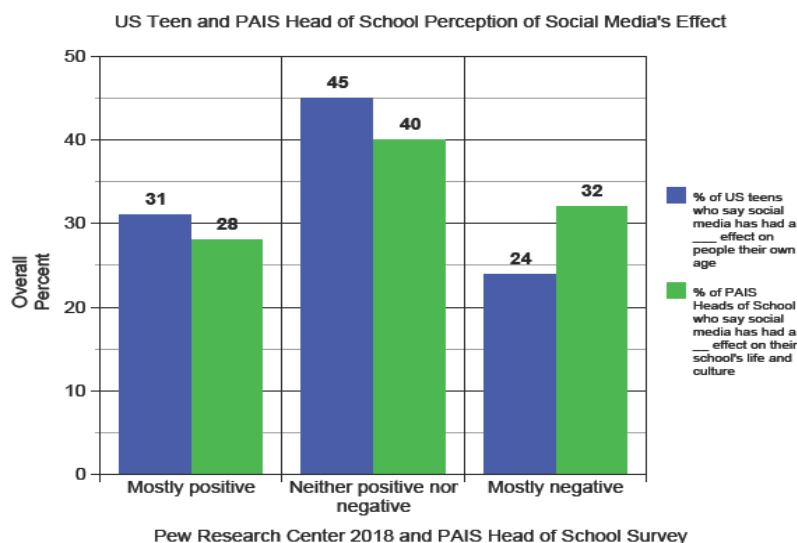


Figure 4. The perception of American teens and PAIS heads of school on the effect of social media

Forty percent of respondents who believe social media has had a mostly positive effect on people their age identify that the technology helps them communicate with friends and family and to connect with new people, as one fifteen-year-old girl articulated, “I feel that social media can make people my age feel less lonely or alone. It creates a space where you can interact with people” (Anderson & Jiang, May 2018, para. 13). Teens who believe social media has had an overall positive effect also value access to news and information facilitated by the technology (16 percent) or being able to connect with people who share similar interests (15 percent). As 14-year old girl cited in the study explains: “My mom had to get a ride to the library to get what I have in my hand all the time. She reminds me of that a lot” (para. 13). Finally, teens who believe social media has had an overall positive effect also cite entertainment (9 percent), a space for self-expression (7 percent), an outlet to get support from others (5 percent), or to learn new things in general (4 percent) as reasons for valuing social media: “We can connect easier with people from different places and we are more likely to ask for help through social media which can save people” (para. 14). The Pew study reveals that teens who view social media’s effect as mostly favorable have found that the platforms improve peer to peer communication, enhance their self-expression, provide entertaining outlets, and expand academic opportunities.

Predictably, the negative and positive perceptions occupy two sides to the same coin. For teens who say, “social media has had a mostly negative effect on people their age, the top response (mentioned by 27 percent of these teens) is that social media has led to more bullying and the overall spread of rumors” (Anderson & Jiang, May 2018, para. 15). The same technology empowering teens to feel less alone, interact with others, and meet new people also provides a powerful platform to hurt others in new and broad ways. A 15-year-old boy cited in the study explains social media, “gives people a bigger audience to speak and teach hate and belittle each

other” (para. 15). Another boy stated: “People can say whatever they want with anonymity and I think that has a negative impact” (para. 15).

In addition to fearing that social media provides a platform for teens to hurt each other, of those who believe the technology has had an overall negative effect:

17 percent...feel these platforms harm relationships and result in less meaningful human interactions. Similar shares think social media distorts reality and gives teens an unrealistic view of other people’s lives (15 percent), or that teens spend too much time on social media (14 percent). (Anderson & Jiang, May 2018, para. 16)

A 15-year-old girl explained, “It makes it harder for people to socialize in real life, because they become accustomed to not interacting with people in person” (Anderson & Jiang, May 2018, para. 16). Another expressed worry over lives that seem to be artificially amazing online, “It provides a fake image of someone’s life. It sometimes makes me feel that their life is perfect when it is not” (para. 16). Their observations make clear that social media has fundamentally altered the way teens connect with each other and represent themselves. With 95 percent of teens in possession of mobile devices and 45 percent online almost constantly, student experiences at school have changed. From peer to peer communication, to their social identity and privacy, to their habits of mind, to their academic development, nearly no dimension of school life has gone untouched by social media and mobile technology’s influence. Is it any wonder that educators’ and administrators’ work has become more complex?

A head of school today needs to be a “public relations expert, manager of school climate and culture, architect of twenty-first century curriculum, caretaker of the globe, diversity watchdog, technology integration specialist” (Hamilton, 2015, pp. 22-23), and perhaps more than anything else school leaders need to be developmental specialists for the digital age, listening with

empathy, wholeheartedly present and caring for students. It is possible that this last priority will be the master key elevating schools' effectiveness in all other areas. It is also likely that the success of all other innovations at schools hinge on students' social, emotional, and cognitive well-being. To thrive academically in school, they need educators to see them clearly, to understand their struggles, and to support their growth. Given so much ambivalence over their experience, this work requires attentive listening. Outwardly, it's difficult to perceive what students are experiencing and frequently they are not so sure themselves.

The circumstance reminds me of the Steve Smith (1972) poem, "Not Waving But Drowning." The poem's persona describes a man who lay moaning but nobody heard. Others suggested, "It must have been too cold for him his heart gave way" (p. 301), but it turns out it had always been too cold, he had been too far out all his life, "And not waiving but drowning" (p. 301). For those safely on the shore, a sign of distress from deeper waters may appear to be nothing more than a familiar greeting. So it may be with students today. It is imperative that educators not mistake their drowning for waving. It is vital that school leaders tune their ear to listen, standing shoulder to shoulder with students, seeking to understand what technology has led them to become. The research literature suggests schools have a long way to go towards this end.

4.4 Social Media and the School Setting: Current Approaches and Emerging Concerns

Given social media's transformative power in students' lives, it is reasonable to conclude that the past decade has brought substantial research and insight into what schools can do to help children thrive within and across networks. The short answer is: *not exactly*. Christine Greenhow and Emilia Askari (2015) offer a comprehensive review of the research literature to "examine how

such technologies are perceived and used by K-12 learners and teachers with what impacts on pedagogy or students' learning" (p. 1). Greenhow and Askari grouped their research into four research categories:

- Establish the technology's effectiveness at improving student learning—least common
- Investigate implementation strategies
- Monitor social impact
- Report on common uses to shape the direction of the field—most common

Early research suggested that the expansion of networks would deepen trust in society (Fox, 2005, p. 11). The outcome has been far different from early predictions. Rather than enhancing trust in society, social media's structural logic elevates outrage, false facts, and hyperbole, manipulating our emotions and dividing people into echo chambers where their own alternative facts bounce off the walls until they settle in as truth. While the research community was busy reporting on simple uses of technology in classrooms, the ways people connect to each other and make sense of the world around them changed. Social media sites drive the change.

Working through Ellison and Boyd (2013), Greenhow and Askari (2015) offered a simple definition of social media:

Social sites are a form of social media defined by the following socio-technical features:

- 1) uniquely identifiable profiles that consist of user-supplied content and/or system-provided data; 2) (semi-) public displays of connections that can be traversed by others; and 3) features that allow users to consume, produce, and/or interact with user-generated content by their connections on the site. (p. 3)

In other words, users put up profiles and share pictures of things that they care about—ranging from quirky cats to inspirational quotations; they share these items with lists of people who can

connect with others through those lists; they watch for people to comment on the things they share, and they interact with them in return. While the process feels simple, it creates significant tensions for adolescents forced to make public decisions on a range of issues—which pictures will I post, whose pictures will I like, which users will get my attention, how frequently will I check in with friends—each platform’s persuasion architecture creates the need for these questions and preconditions all the answers leading adolescents to say in the most complex moments, “I don’t know why I did that.”

Their teachers and heads of school predictably do not know why they did that either and the groundwork to help students overcome the system’s manipulation is equally thin. In her discussion of Crook’s (2011) research on social media in school settings, Greenhow and Askari (2015) acknowledge that, “Many teachers and teacher educators remain uncertain about how to meaningfully integrate this technology or assess its impacts” (p. 3). Ultimately, Greenhow’s (2017) comprehensive review of the research literature reveals that, “to date, review of the educational research on learning and teaching with social network sites provide little guidance to K-12 teachers or teacher educators on best practices for integrating these technologies in education” (p. 4). What troubles me most is that while questions about how to use social media in schools matters, the preceding ontological questions about what social media has done to our being in the world matters more. The research literature documents teachers using social media mostly to support traditional learning strategies and objectives—a way to connect for extra help on homework, for example. The research pays much less attention to student behaviors with social media outside of school or how social media impact their relationships with others in school. In their recommendations for future research, Greenhow and Askari call for studies that:

bridge formal and informal learning context and practices with newer technologies, especially those that dominate popular culture or professional practices in industries outside education (e.g., journalism, business, entertainment). Schools do not operate in a vacuum. They are situated in society and culture. The field of educational technology needs studies that help connect school life to larger societal and technological trends. (p. 19)

This study explores adolescent life on both sides of that bridge, the broader society accommodating the worlds it connects, the cultural impact of the networks forcing us to examine the connections, and the leadership practices heads of school can follow to know, engage, and inspire networked adolescents.

Guiding students and educators out of the trap of technology requires relationship-based leadership priorities commensurate with the radical changes of the digital age and the impact that shifting networked infrastructure has had on students' personal and relational sense of self. In this moment of reflexive modernity, schools have an opportunity to support all aspects of students' lives by assessing technology's collateral damage and standing with them as they process increased social and emotional complexity. Through my work as head of two independent schools, I am not so naïve to believe that educators can equip elementary school children with some new heightened sense of their place in the global system. Nor do I believe middle schoolers can grapple effectively with unimaginable new modes of representation empowering them with the capacity to act and struggle against invisible systems structuring their lives. However, I do believe we can get them thinking and talking about how the digital connections and social media platforms shaping our social and working lives change who we are, how we see each other, and how we understand ourselves. I believe that by being wholeheartedly present with them and caring about them, by listening with curiosity, by valuing their world and seeking to be part of it, educators can join

students in an ontological turn leading to more emotionally balanced ways of processing technology-based ambivalence in their lives. The next chapter presents “Our Perspectives,” in the form of empirical data collected through surveys. The post-positivist inspired shift reveals how heads of schools perceive these issues in their students’ lives and affecting the climate and culture in their schools.

5.0 Our Perceptions

“She glanced down the corridor of Cohen’s room in the rain and saw, for the very first time, how far it might be possible to get lost in this.”

(Thomas Pynchon, *The Crying of Lot 49*, 1966, p. 62)

5.1 Evangelizing the Vision: Modeling Micro-Level Innovation in Perceiving and Engaging Students

Just over a decade ago, as I prepared for the start of my first headship, I felt inspired by a simple concept memorably communicated in an *Independent School* magazine article,

I hope never to read a vision statement that promises to maintain rather than improve, but there’s that danger for some. Although many independent schools are already on the train to the future, some are at the station waiting for the train to stop for them, and others are saddling their horses and looking to the past with optimism. (Bassett, 2009)

NAIS president, Pat Bassett, understood that strategic evolution might work at some schools, but others required full-blown revolution. I recall my fascination at the time with curricular change—project-based learning integrating critical thinking, collaboration, creativity, and communication skills. I thought about the business implications of networks—inbound marketing opportunities, donor research and segmentation, faculty recruiting and retention, responsive websites, and social media. The need to innovate on both sides of the house—academic and business—was clear.

Today, NAIS continues to encourage and support innovation-minded leadership. Kao (2017) asserts:

In an innovation-driven organization, the leader must evangelize for the vision, support talent, provide resources, and create a sense of possibility and desire for reasonable risk taking that informs the culture of the organization...Buy-in at the top of the organization is essential to an innovation agenda. And having leaders who understand their role in the overall agenda is key. Leaders are keepers of the vision and storytellers-in-chief, and catalysts who empower others, make useful exceptions, and provide resources. (p. 34)

During the past decade, nearly all heads of independent schools have cultivated and supported strategic changes big and small across all aspects of school life. Yet, something more fundamental underlies all this innovation, namely, the same forces necessitating all those other changes also contributed to paradoxes in our students' lives that complicated their personal identity, social experience, and habits of mind. As educators embraced major and visible innovations in curriculum and instruction, fundraising and enrollment management, a less visible need for innovation hid in plain sight. Namely, networks required us to reimagine how our students experience our schools and how the adults in their lives understand, engage, and inspire them.

What Bassett described as the third great revolution in America, a transformation driven by networks giving students unprecedented access to each other and all forms of information has radically changed all relationship-based businesses. Education may rank at the top of the list. Heads of independent schools bear witness regularly to the human experience at its most raw. Some reasonable and measured parents can lose perspective when they perceive their child to be at risk. I often find themselves saying, "While nobody in the world will ever know your child the way you do, my perspective on thousands of children your son's age leaves me convinced that

what he is experiencing will pass and may be essential for his growth.” For most heads of school, this wisdom of experience serves as our ace in the hole. As one PAIS head of school explained in my survey, “The world has become in the ‘now,’ even for parents as we work with their kids. I frequently have to remind parents that raising and teaching kids is a process and not an event.” Yet, our always-on, information-saturated, hyper-competitive culture contributes to anxiety, an erosion of trust, and short-circuited relationships with some nervous parents overly preoccupied with their children’s short-term happiness.

The third great revolution in America has not contributed to parental patience. Rather, in many regions of the country, independent schools operate in a consumer culture where they face the constant threat of parents taking their children elsewhere if results lag expectations. Although this competitive climate should conceptually lead to school improvement, too often it contributes to shortcuts where business pressures lead to compromises that are not in the best interest of the child involved or the school community. In the short-term, these compromises balance school budgets, but in the long-term, such tuition retaining measures erode school programs and lead to institutional decline. Educators’ work requires patience and commitment. They are constant gardeners, creating conditions for the students in their care to thrive, tending to the variables that might interrupt that process, and allowing that a good deal of what happens will be out of their control. The natural conflicts emerging within that system prove to be essential to the development of resilience, perseverance, and personal responsibility. The broad perspective as gardeners allows educators to see the interconnectedness of the whole, to intervene as needed and to stay back when beneficial. The rise of networks now complicates these gardens and brings a new responsibility for educators to innovate the methods they use to cultivate relationships all around.

When I see female students standing together in complete silence staring at their phones, I do not perceive loss or disconnection. I imagine their presence lived out concurrently and frenetically in real and virtual space. In that moment, the individual girl may feel the provincial presence of people nearby *and* experience liberation from that embodied moment through the portal of the screen. She may leave the group and connect with other more interesting people. She may turn to Snapchat and share a picture from her day with a broader group of networked friends. She may feel the obligation, disguised as a privilege, to keep several snapstreaks alive. She may feel sad that one of her recent posts received very few likes and consider what it will take to stand out. She may see that one of her friends, perhaps one of the girls standing silently near her, posted a picture of herself poolside that is getting considerable attention. She might wonder what her own friends and family will say if she posts a similar picture. How to be just edgy enough to attract attention, just tame enough to fit in? Bored with Snapchat, she may switch over for a moment to play Candy Crush Saga. The platform allows her to play five times every thirty minutes—this unique feature from the game designers prevents her from playing continuously but keeps her coming back as frequently as ten times an hour. Switching to her Instagram account, she may notice that one of the “friends” standing quietly nearby and staring at her phone had people over yesterday for a homework session. Not sure why she was not invited, she may decide to take the highroad and “like” the picture as a way of saying—I know you excluded me, and I don’t really care. She may switch to YouTube—what is Jenna Marbles doing? *Come Do Terrible Things to My Hair With Me. How Girls Fall Asleep. Things Guys Lie About.* Her phone may ding. She may look up for a moment and say, “Hey...I gotta go. My mom’s here.” And...one of the girls standing nearby might pause for a moment to say goodbye.

Loneliness and depression are on the rise in a cultural moment when people are more interconnected than at any other point in human history. Turkle's (2011) summary of the issue captures my primary concerns:

Online we find "company" but are exhausted by the pressures of performance. We enjoy continual connection but rarely have each other's full attention. We can have instant audiences but flatten out what we say to each other in new reductive genres of abbreviation. (p. 280)

In every disciplinary case I have faced where technology is a factor, adolescents have felt somehow disassociated with their embodied selves and uninhibited by the normal constraints that give limits to their physically bound interpersonal behaviors. The results of my survey show that the PAIS member school heads who responded are ambivalent about the overall effect social media has had on their school's culture and climate. Accepting for now that social media and mobile technology carry tremendous risk and opportunity, it appears that there is a need for heads of school to model fully present, engaged, and empathetic listening to understand their students experience. To fulfill this responsibility, ensuring that educators extend their effectiveness knowing, engaging, and inspiring our students in the digital age, I wanted to know how my colleagues perceived the effect of social media and mobile technology on their schools' culture and climate and how their leadership practices had evolved in response. In short, the stakes associated with getting this right are far too important for heads of school to worry alone. Additionally, as one of my PAIS colleagues explained in this study's survey, "It is a lot of work to stay current on the appropriate topics and to support division directors in their work with students." I hope by coordinating educators' perspectives and sharpening the focus on the most pressing issues, that work may become a bit easier.

5.2 Observations From Our Schools: The Influence of Social Media and Mobile Technology as Perceived by PAIS Heads

Teachers and administrators are left to wonder, as Joshua Cooper Ramo does at the opening of *The Seventh Sense: Power, Fortune, and Survival in the Age of Networks* (2016), how promising this transformation brought by networks has been and will be for our humanity. Ramo observes, “None of us yet knows whether the future that emerges from our confrontation with real and virtual phenomenon, from a world where thick connection is normal, will produce an information paradise or a terrifying dystopia” (pp. 28-29). In this moment of reflection, a time when networks are in their infancy and technology’s unintended consequences are manifesting, it’s up to educators to prepare students to mitigate dystopian risks. While technologists shaping many of today’s attention-extraction platforms know how they are mechanically manipulating students’ minds and shaping their behavior, many seem to be uninterested at present in anticipating technology’s unintended consequences. The responsibility, therefore, to assess and address the ways social media and mobile technology influence students’ lives and school communities falls on educators. It is clear from my survey that heads of school care about the issue.

Most generally, heads of school identify as very important or important the need for “a more informed perspective from my administrative team regarding my students’ use of social media and technology” (90 percent), a responsive leadership approach “including the way I frame, interpret, and discuss the challenges related to social media and mobile technology” (86 percent), and a “formal education program on mobile technology usage” (76 percent). Heads of school seem to believe that the way they and their leadership teams perceive and discuss how social media and mobile technology influence students matters more than formal programs designed to educate them. This implies that heads of school believe knowing and understanding students and forming

more influential relationships with them through that understanding matters more in cultivating a thriving school culture than a formal curriculum around technology use. This shared sentiment heightens my perspective that care ethics offer the “best fit” conceptual philosophy to support students today.

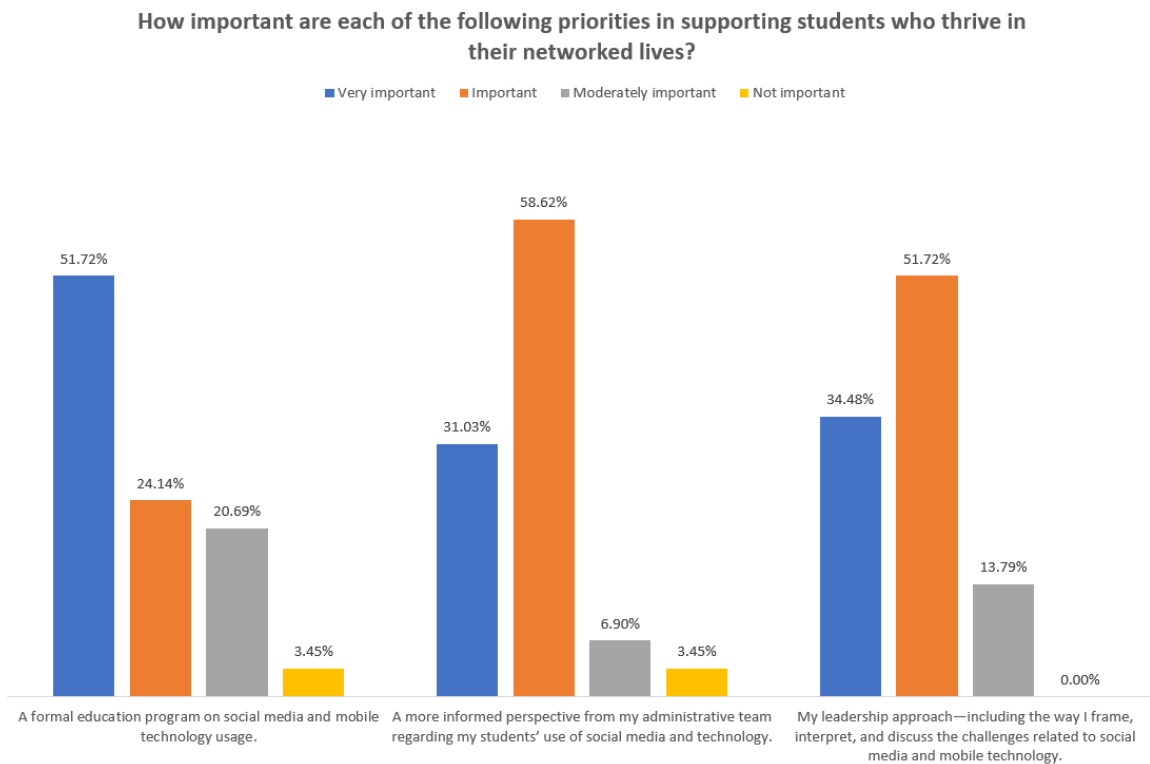


Figure 5. PAIS heads of school responses to a questionnaire regarding supporting students in their networked lives

5.2.1 Peer to Peer Communication Complications

One of the prominent areas of concern that PAIS heads of school have identified is the influence social media and mobile technology has had on peer to peer communication. Bauman (2007) believes that:

the teenagers equipped with portable electronic confessionals are simply apprentices training and trained in the art of living in a confessional society—a society notorious for effacing the boundary which once separated the private from the public, for making it a public virtue and obligation to publicly expose the private, and for wiping away from public communication anything that resists being reduced to private confidences. (p. 3)

In the answer to a free response question in my survey, one head of school explained concern over students using social media as a public confessional: “students often do not think before they post things and forget about the audience or how damaging it could be for themselves or others.” The consequence from the perspective of another head is, “drama that is minor and would have blown over and been ‘done’ in prior generations continues to fester and then boil over at home and over the weekend because of social media outlets and constant, unregulated and unmonitored access to mobile technology.” Educators seem to have reached a point of objective awareness that communication technology contributes to the persistence of problems. I worry that far too often educators may approach these issues with “old school” virtue ethics rather than more productive care ethics. Students’ navigate multiple worlds, mostly out of range from the adults in their lives. I wonder how frequently they experience adults listening to their experience and putting themselves in their students’ place, appreciating their journey to a particular feeling and responding in ways that resonate with their experience.

Mediated by a screen, students may fail to anticipate that their online activity will result in real consequences. It turns out that the physical body’s obligation to be civil, respectful of self and others, does not go away—and may in fact heighten—when interactions become memorialized and reproducible online. In other words, they are always present and culpable even when they feel ontological separation from their technologically mediated utterances. There may be the illusion

of anonymity or safe distance, but the self is always present and connected to its virtual constructions—its social media pages, texts, photos, and videos posted. Even in the moment of transcendence (a realization of the Cartesian rationalist fantasy) the body is always present. Transcendence is possible precisely because there is a body that anchors the virtual representation of self and that body always faces the risk of repercussion even when the affront happens in cyberspace. As one head summarized in a free response question, “kids perceive what they write as anonymous and believe they won’t be accountable for what they say.” In a cultural moment when incivility reigns, when truth becomes lies and lies become truth, when crassness prevails, heads of independent schools demonstrate a commitment civility and decency in students’ real and virtual lives. To be sure, these standards matter. Yet, enforced with analytical precision from disembodied virtue’s safe distance, educators may miss the opportunity to be touched by the students’ experience. Students may feel misunderstood and they will be right.

Emerging from the disinhibition effect experienced through technologically mediated communication, heads of school witness a variety of problems. Heads of school observe *frequently* or *occasionally* “social cruelty—including exclusion and gossip” (97 percent); to a slightly lesser degree they observe *frequently* or *occasionally* “malicious or cruel messages sent” (80 percent), and “sexually explicit or provocative messages sent” (59 percent). Heads of school observe *frequently* or *occasionally* additional complications related to peer to peer communication among their students, including “weakened face-to-face communication skills” (93 percent) and “a diminished ability to patiently solve interpersonal problems” (93 percent). Finally, 93 percent of heads witness *frequently* or *occasionally* their students’ “need to overshare personal information.” Heads of school responding to this survey agree that social media and mobile technology accelerate and intensify several inclinations that exist offline.

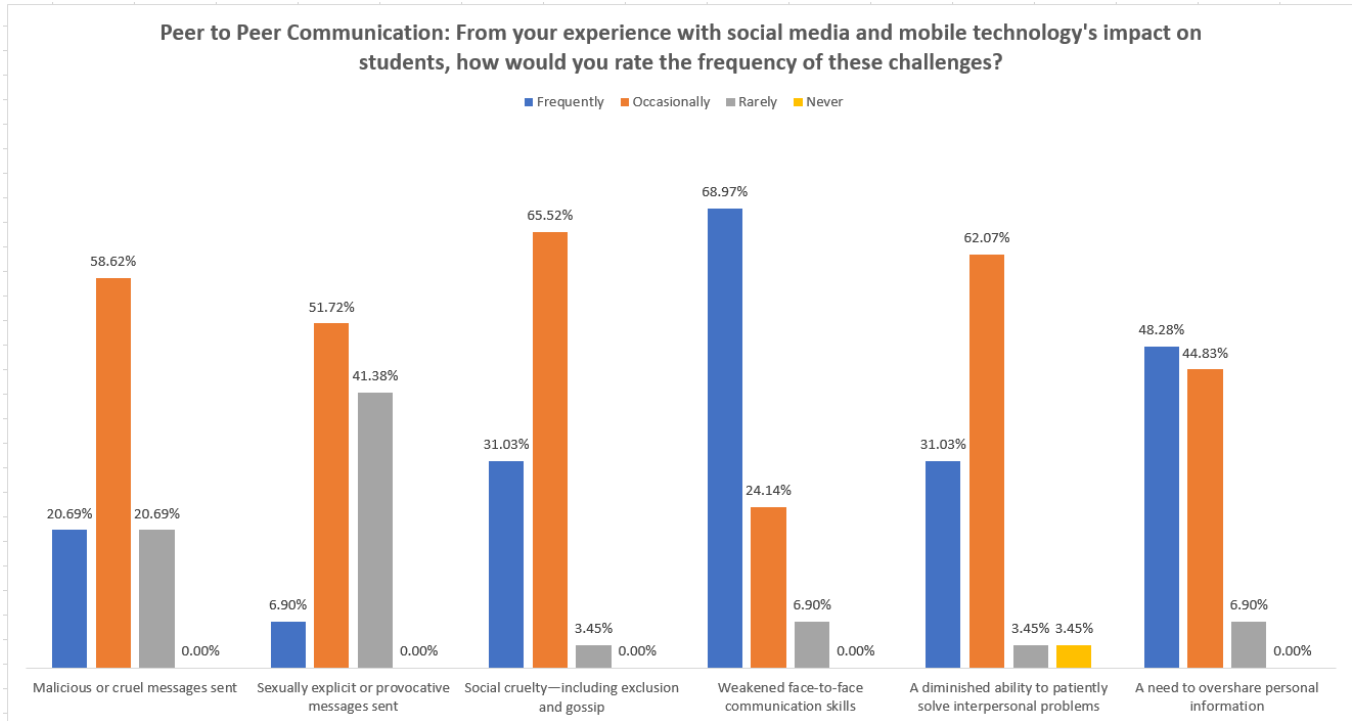


Figure 6. Problems with peer to peer communications among PAIS heads of school

As educators heighten their awareness of students' experience, there is value in remembering the unique ways that the digital world may lead to their anxiety. In their "Systematic review and meta-analysis of cyber-victimization and educational outcomes for adolescents," Gardella, Fisher, and Teurbe-Tolon (2017) compiled current research to show that the structural conditions of technologically mediated communication conceal, exacerbate, and accelerate various forms of cruelty. Specifically, online interactions may happen unsupervised and hidden (Liau, Khoo, & Ang, 2008), hence preventing peer support and protection. Additionally, because adolescents are "always on," there is no escape from when and where victimization can occur (Johnson & Puplampu, 2008). This tech-mediated victimization can also be publicly shared and spread contributing to the victim's personal destruction (Hinduja & Patchin, 2006). Ultimately

responsible for their schools' climate and culture, heads of independent schools have had to redefine their extent of reach, a responsibility extending well beyond school walls.

The majority of heads of school responding to this study's survey have seen first-hand the in-school consequences emerging from out of school communications. In a response to an open-ended question, one head explained, "these communications tend to be ones that do not have a direct connection to the school, and yet parents expect the school to take disciplinary action to resolve the issues that arise." Educators have come to see that technology, most notably social media, has forever altered—and in the short term profoundly complicated—adolescent communication and identity development. Concurrent with the need to respond to conflict in school emerging from mediated communications out of school, heads also observed weakened face to face communication skills complicating the efficiency of resolving out of school issues. Educators may find an opportunity not only to help students develop the eroded skills, but also to forge deeper understanding and connection with them—an essential attribute of effective schools—through the process. boyd (2014) explains that to "understand how context, audience, and identity intersect is one of the central challenges people face in learning how to navigate social media" (p. 30). In short, students are navigating, largely outside any adult guidance, an incredibly complex communication architecture, an experience likely to complicate their personal and social identities. Educators listening to students' experience may model a relational form of power focused on enhancing the strength and courage of every member of the school community. Guided by this ethic of care, educators may sustain prolonged conversations finding a shared way to live the school's core values.

5.2.2 Identity Complications

Through this study's survey, heads of school connected complications in their students' identity to the broader challenges they face maintaining coherent brand identities within their schools. To establish piercing clarity on outcomes and to market schools effectively in today's consumerist culture, many independent schools have supplemented their traditional mission statements with some version of a mission promise. Advancement Office personnel may specifically describe who a student will become and what the student will be able to do upon completion of the school's program for current constituents and prospective parents. With the unique commitment to values and character, independent schools take this work seriously. Educators hope that all members of the school communities can identify exactly what is meant by a "Fill-in-the-Blank With Your School Student." Perhaps more than anything else, *this* is a school's brand. Since so much of the actual and perceived effectiveness hinges on students' being and reputation, it feels important to understand how heads of school believe social media and mobile technology have complicated or enhanced students' identity development.

Be sure that when adding new sections or captions, to return to the table of contents or list of figures/tables and right click on one of the listed items. Then be sure to select Update Field – Update Entire Table, so that any new or edited content is reflected there.

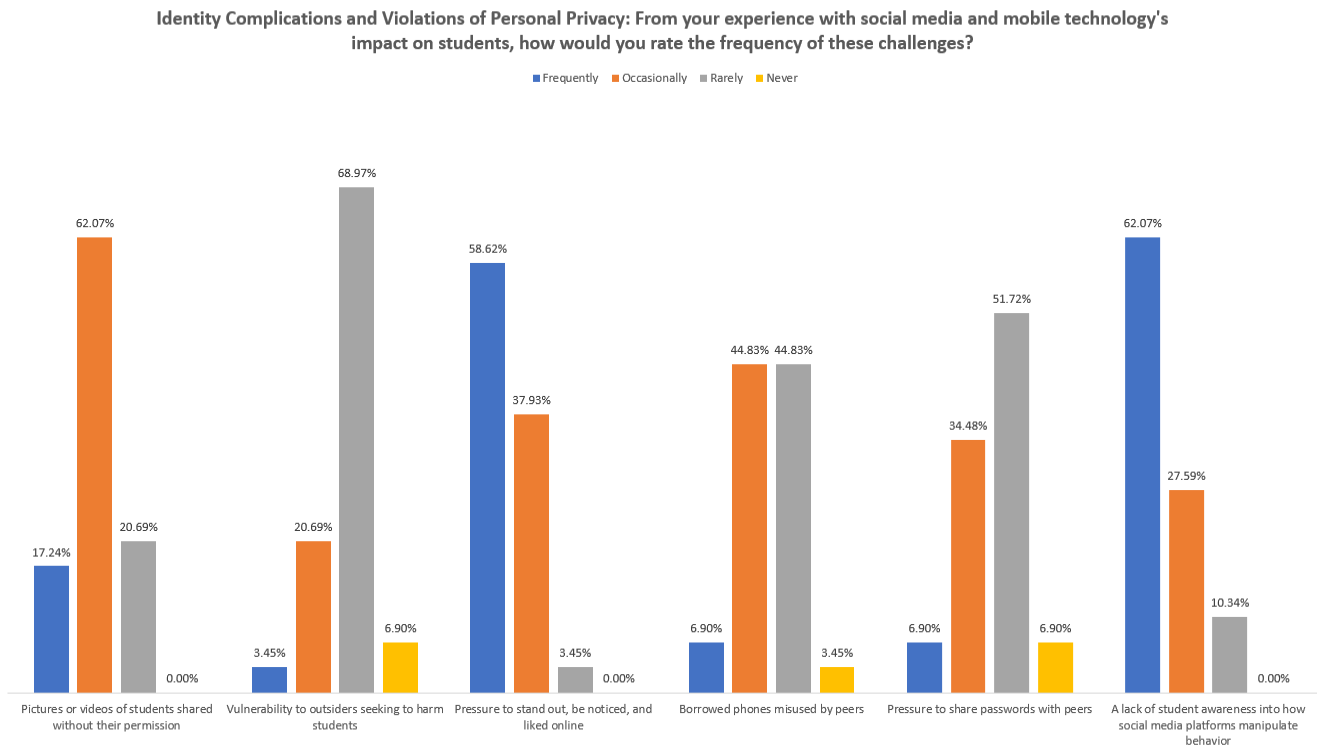


Figure 7. PAIS heads of school perceptions of violations of personal privacy on social media

Among the behaviors that heads of school observe most often, 97 percent of them frequently or occasionally observe students experiencing “pressure to stand out, be noticed, and liked online.” The paradoxical challenge to stand out and fit in simultaneously carries an additional layer of complexity. Specifically, “networking makes it easier to play with identity (for example, by experimenting with an avatar that is interestingly different from you) but harder to leave the past behind, because the Internet is forever” (Turkle, 2011, p. 169). Additionally, students intuitively behave differently across a variety of platforms without being able to fully articulate

why. Ninety percent of heads of school observe “a lack of student awareness into how social media platforms manipulate behavior.” Boyd (2014) offers a compelling rationale:

Their seemingly distinct practices on each platform might suggest that they are trying to be different people, but this would be a naïve reading of the kinds of identity work taking place...she’s choosing to represent herself in different ways on different sites with the expectation of different audiences and different norms...Regardless of the reason, the outcome is a hodgepodge of online identities that leave plenty of room for interpretation. And in doing so, teens both interpret and produce the social contexts in which they are inhabiting. (pp. 38-39)

The fundamental responsibility independent schools share to shape students’ habits of mind, values, and character proves to be remarkably different in the newly networked world. From the Frank Boyden days at Deerfield, heads of school have monitored closely how students attempt to stand out and be liked. For example, heads of school may encourage students in violation of the dress code—attempting to stand out and fit in simultaneously—to find another way to make their mark. They may attempt to inspire their students to attract attention on the performance stage, or athletic field, or in classroom debate, along the way offering positive feedback on what appears to be their moments of hard work, resilience, or kindness.

In the world before social media and mobile technology, administrators and educators established campus norms in plain sight and with great coherence. They could expect that students would ultimately aspire to their schools’ highest standards because that is *how the world works*. Today, with the rise of networks, a silent, invisible, and pervasive force changes the dynamic. Perspective on dress codes as an obvious way to connect with students, to implicitly say, “I see you and I care,” does not necessarily result in a deeper connection with that child. Rather, the

student may walk away from the conversation and gaze doe-eyed at images of laughing friends at other schools wearing whatever they want. Instead of feeling an obligation to their current school community, students in this moment may feel they are excluded from something better. Fearful that their child may shut down because of unhappiness, parents may indulge the need to explore other schools. To an outsider this may look like the free market at work, and for parents paying attention to their child's happiness, that is exactly what it is. Yet, for heads of school seeking to cultivate something much more enduring than momentary happiness and supporting a community of students—including those who transferred to their school because they did not like the dress code at their former school—they know something more urgent: the child is not unhappy because of the dress code. Rather, the child lives in a consumer culture where moment-to-moment happiness is the ultimate test case for how things are going. While many families embrace frustration, disappointment, and failure as vital experiences leading to their child's resilience, others may view those feelings as a sign that it is time to move on to greener pastures. Networks accelerate that anxiety and opportunity.

In today's market, heads of school grapple with a powerful paradox. On the one hand, networks have given everyone access to reach new markets and tell the schools' stories in compelling ways. On the other, those same networks provide pathways for other entities that may induce anxiety and doubt, pushing people deeper into their echo chambers and reinforcing their most troubling concerns. Although heads of school will be hard pressed to resolve the paradox, they may consider the value of sinking into it at its deepest level—the individual connection formed with students and the conditions created for others to do the same. An independent school's brand grows stronger through consistency and coherence. Decades ago, educators had to worry about what misinformation parents shared leaning against their cars in school parking lots.

Today, as one head of school explained in the survey, to the detriment of our schools, networks function for, “spreading misinformation about school policies and decisions to instigate.” The familiar tendency for people to seek company for their concern reaches a staggering new fury when readymade tools facilitate always-on gossip and rumoring. The same networks create the false assumption that, in the name of transparency, the school must disclose details of transgressions involving other people’s children. To be sure, new habits of mind brought by networks have complicated the head of school’s work.

5.2.3 Habits of Mind

While someday social media, mobile devices, and other technologies may make independent school leaders work more effective, today’s heads of school experience increased complexity within their school building often brought by mediated communications outside the school building. Without question, what is happening outside of school and running as a subcurrent inside of school, directly affects students’ social, emotional, and cognitive growth. It is clear:

the rise of mobile devices is introducing even more challenges, taking the already widespread notion of being “always on” to new levels and creating new pathways for navigating physical spaces. As social media becomes increasingly ubiquitous, the physical and digital will be permanently entangled and blurry. New innovations will introduce new challenges, as people try to reimagine privacy, assert their sense of identity, and renegotiate everyday social dynamics. (boyd, 2014, p. 211)

As educators innovate around the ways they cultivate relationships within schools, it may be helpful to understand more clearly the stress this always-on experience brings to students’ lives.

Wired teens today face intensified forms of long-established stressors and new forms of stress made possible by mobile technology. Through their research, Weinstein and Selman (2014) identified six kinds of digital stressors that engender two distinctive types of digital stress. “Type 1 Stressors” include “mean and harassing personal attacks,” “public shaming and humiliation,” and “impersonation.” These experiences echo forms of harassment that existed prior to networks but take on new dimensions and intensity in their networked lives. “Type 2 Stressors” take new forms unique to their technologically mediated, networked social experience. They include, “feeling smothered,” “pressure to comply with requests for access,” and “breaking and entering into digital accounts and devices.” These forms of aggression transpire in adolescents’ attempt to gain access to, monitor, or control others. At the end of their research, Weinstein and Selman identify several unknowns: do these stressors reflect chronic strains or acute occurrences? Do they have similar psychological consequences? Are they conditions to live with requiring adaptation, or problems to solve necessitating supportive intervention? Currently, heads of school creating conditions for students to thrive must arrive at their own answers to these questions. If they are to come at all, those answers will emerge from the honest expression of needs and feelings as educators listen to students and respond with conversation continuing empathy.

Of all the challenges introduced by social media and mobile technology to their schools, heads of school observe frequently or occasionally “a constant sense of distraction” (100 percent) and “technology overdependence or addiction” (100 percent). Associated behaviors observed frequently or occasionally include “diminished attention span” (97 percent) and “an inability to be in the moment” (96 percent). Nearly all heads of school also frequently or occasionally observe “ignorance around how social media platforms manipulate and condition behavior” (97 percent). A more granular analysis of the data from this study reveals that neither a head of school’s age or

tenure, nor the size of his or her school predict perception of social media and mobile technology’s impact on student life and culture with one exception—heads of school with less experience are more likely to identify “technology overdependence or addiction” as a frequently observed challenge. Generally, this suggests that younger heads of school worry more than their older peers about technology’s detrimental influence in their students’ lives.

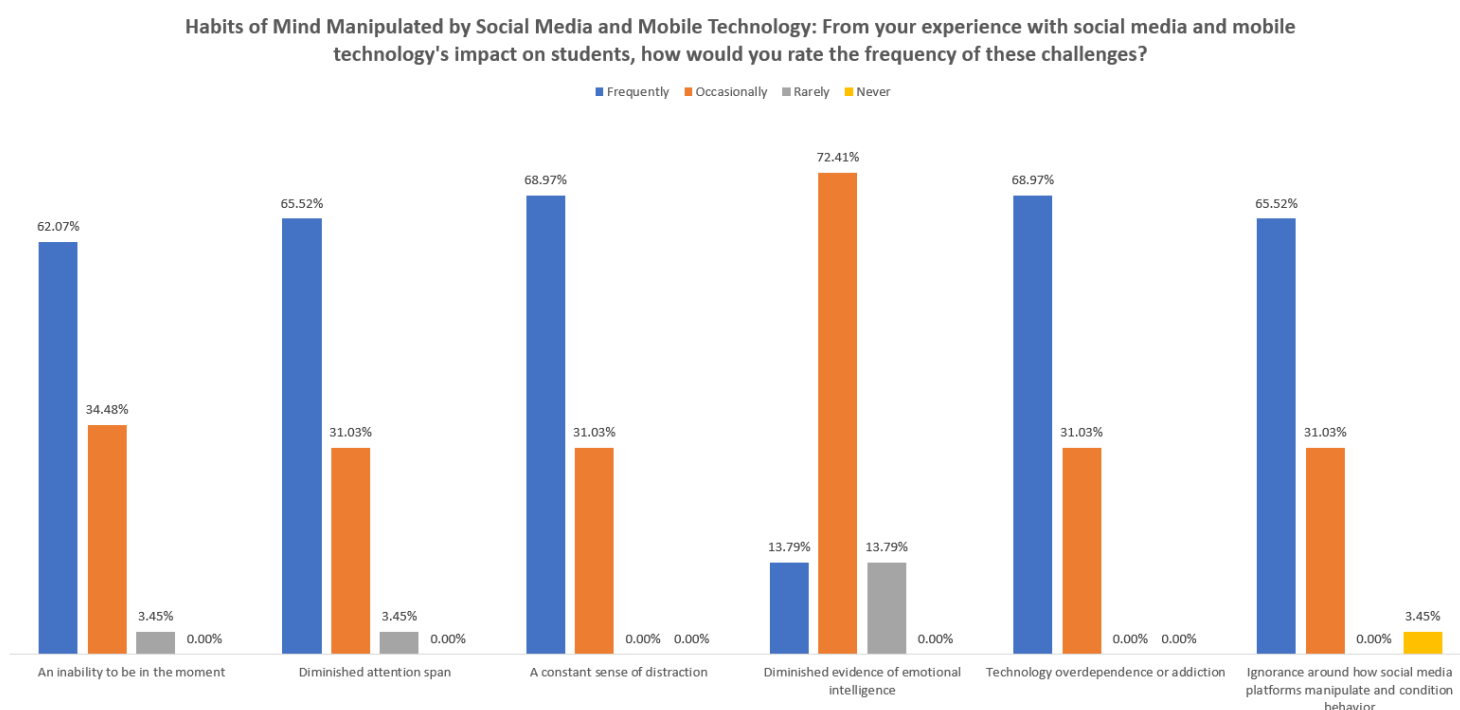


Figure 8 . Perspectives of PAIS heads of school on habits of mind manipulated by social media and modern technology

Further developing the perspective on these challenges, open-ended survey data illustrate concern over the decline of patience from constituents who come to many heads of school offices, “wanting the instant ‘fix’ interpersonally because that is what is expected online.” Additionally, the rise of networks not only accelerated students’ perception of how quickly a problem should be resolved, a similar expectation has influenced some of their parents *and* networks have linked them inextricably. A child’s overattachment to the apron string takes on new dimensions and consequence when the apron string is everywhere. Several years ago, I took a call from a parent

concerned about his daughter's grade on a science test. "She studied for hours," he explained. "The test clearly wasn't fair." I assured him that I would talk with her. I wondered if she had a chance to talk with her teacher. "I don't think so," he responded. "She got the test back last period and is in the bathroom now—very upset. Can you hold for a moment? She's on the other line. I'll find out."

5.2.4 Information Discernment and Academic Development

I have found that some of the most engaged families at my school want to think deeply about how technology is giving rise to new ways of being in their children. They also expect the school faculty to have informed perspectives about how the academic program will prepare their children for an uncertain future. Interestingly, the shift from what a student knows to how a student learns aligns with a broader philosophical shift from epistemology to ontology that is a productive way to assess a range of twenty-first century phenomenon where questions of being and identity feel more urgent than truth and certainty. Moreover, care ethics offering educators an opportunity to shift perspective to the students' experience also has ontologically-oriented underpinnings.

Despite the trumped up "fake news" crisis gripping the United States today (Schwartz, 2018), only 58 percent of heads of school participating in this study frequently or occasionally observe their students' "susceptibility to manipulation by misinformation, fake news, or twisted facts." Additionally, only 65 percent of heads frequently or occasionally observe "diminished classroom participation skills," and 69 percent frequently or occasionally observe "academic cheating through mobile device or social media."

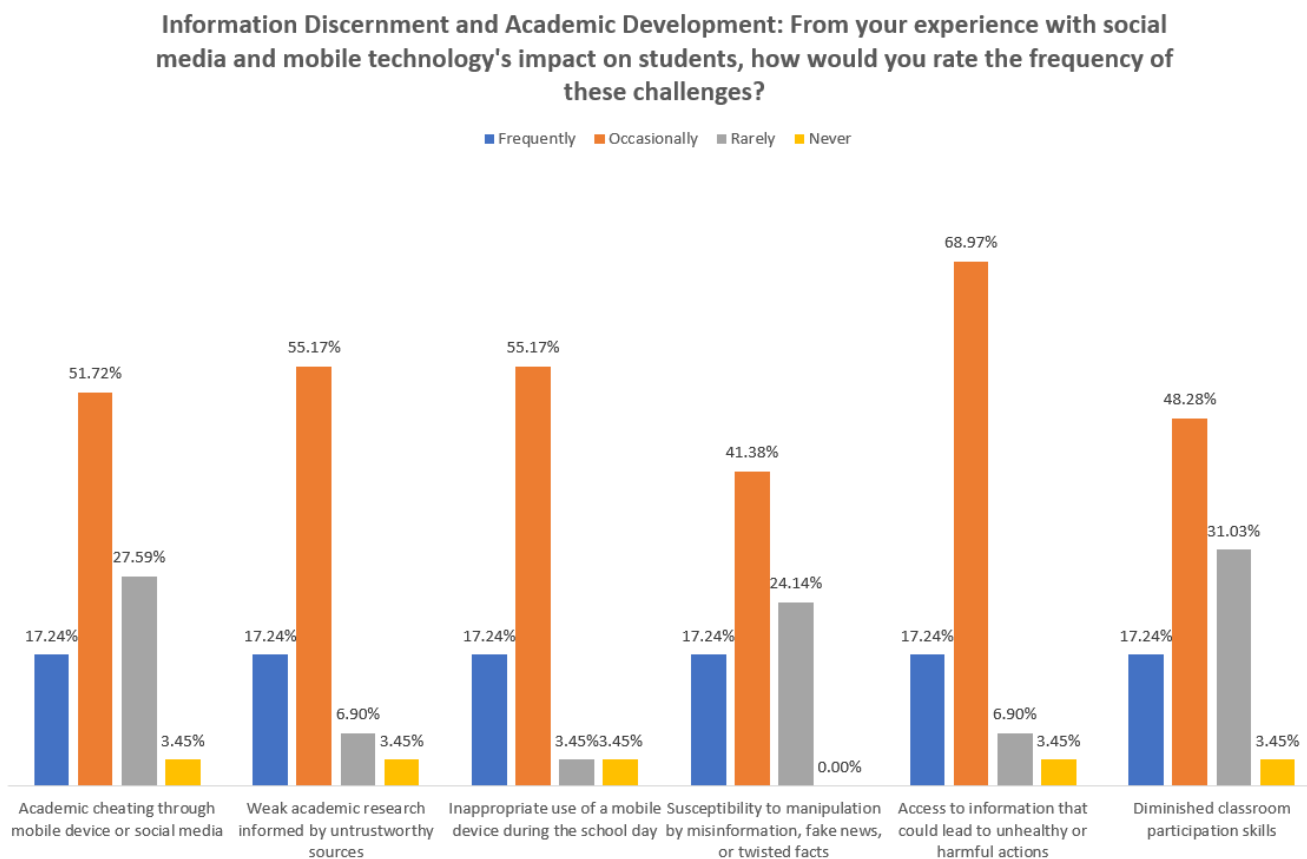


Figure 9. PAIS heads of school perspectives on information discernment and academic development

A slightly higher percentage frequently or occasionally observe “weak research informed by untrustworthy sources,” (72 percent) and “inappropriate use of a mobile device during the school day” (72 percent). Regarding information discernment and access, heads of school observe most frequently “access to information that could lead to unhealthy or harmful actions” (85 percent). Generally, PAIS heads of school who responded to the survey believe that students’ critical thinking skills and teachers’ ability to engage them in the classroom remains strong. Yet, there is greater concern that exposure to harmful content online might lead to students’ harm.

5.2.5 Asking Effective Questions

Given the rise in anxiety and depression among students, educators may need to think carefully about how and why they offer intervention and support. Students experience technology-based paradoxes and associated ambivalence through a variety of interactions. For example, social media creates an opportunity to stand out *and* an obligation to fit in. They feel social pressure to post pictures that attract attention and become noticed. Simultaneously, they feel the threat of rebuke from their peers or reprimand from their parents. Going too far in either direction can lead to adolescent catastrophe. Some of those choices that go too far lead to conversations with school officials. As one head of school observed in the survey, “too many kids don’t understand the implications of what they say or do.” Additionally, heads of school agree that there is no universal solution to proactively keeping students out of trouble. Rather, educators’ work with students represents an endless process. As one head of school explained, “successful initiatives vary student to student. Unfortunately, great success occurs after an incident has occurred.” When administrative teams work through routine disciplinary issues involving mobile devices and social media, they are interested in sorting out what students have done slightly more than guiding them through how the technology influenced them. Practically speaking, the epistemological focus makes good sense and leads to restorative responses that can redeem the individual and heal the community after an infraction. Conceptually speaking, the data suggest a desire among heads of school to extend that work to help students perceive and counteract technology’s influence over their behavior.

Nearly universally, heads of school understand and accept their responsibilities as hard-boiled detectives sorting out the details of behavioral infractions disrupting their school communities. Epistemologically oriented, they seek out: what is there to be known? Who knows

it? How do they know it? What are the limits of knowledge? One hundred percent of PAIS heads of school responding to the survey indicated that when faced with a routine disciplinary issue involving social media and mobile technology they “definitely” (approximately 90 percent) or “probably” (approximately 10 percent) would: question the students involved, discern various levels of involvement among students, and warn students about the near and long-term risks associated with their behavior. Additionally, nearly all PAIS heads of school (97 percent) would help students understand the impact their behavior has on others.

Heads of school appear to be somewhat less likely to explore the ontological questions naturally emerging from care ethics. When they do apply an ontological perspective to challenges related to adolescents and technology, they explore: which world is this? What is a world? What kinds of world are there? How are they constituted? What happens when different kinds of worlds confront each other, or when boundaries between worlds become violated? Sixty-six percent of PAIS heads of school indicated that they “definitely would” explore with students the gap between their real and online choices. Sixty-nine percent suggested they “definitely would” help student think about the ways social media and mobile devices manipulate their behavior. Fifty-nine percent indicated they “definitely would” develop in students a deeper sense of how their identity shifts from one context to another. On each of these tactics, 28 percent to 34 percent suggested they would “possibly” use the approach. Extending an ethic of care through these or other ontologically-oriented questions may help students feel less confused, uncertain, alone, or anxious as they sit with the paradoxes tugging them in multiple direction simultaneously. Educators committed to this outcome require strategies to build trust with students and extend conversations. By listening with non-judgmental curiosity and connecting the students’ emotional experience to something similar within themselves, educators may develop a more complete understanding of

students' experience *and* model a form of mutual empathy that students may carry with them into their online experience.

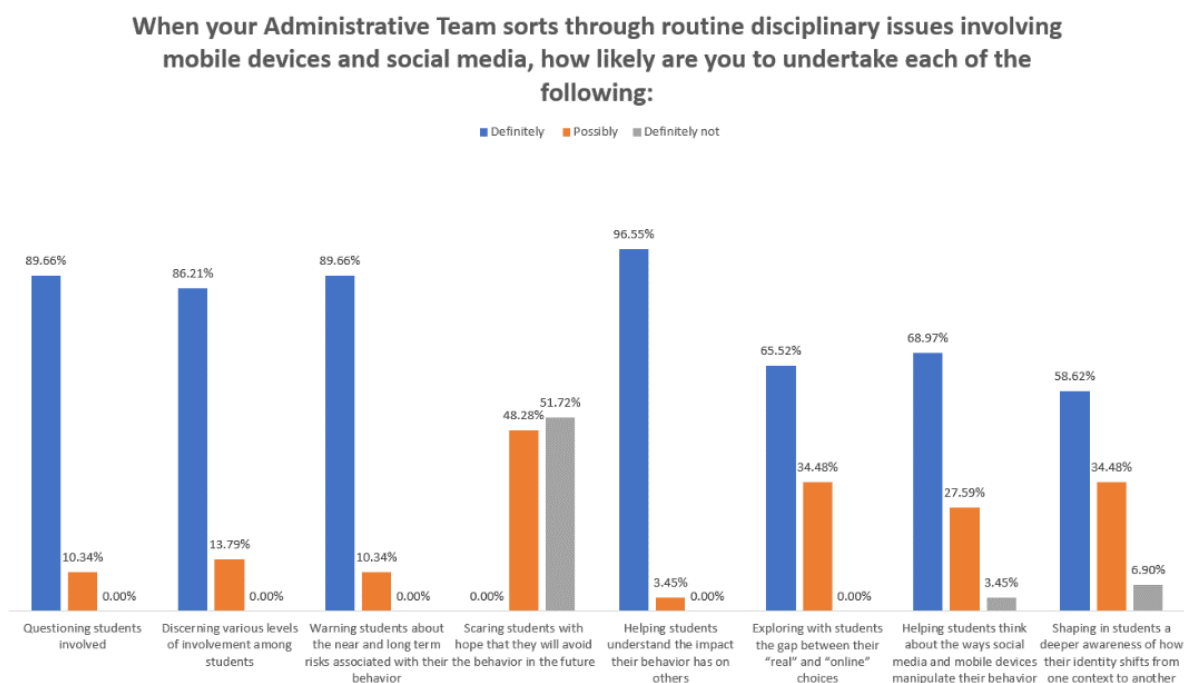


Figure 10. Disciplinary practices associated with social media in PAIS schools

Supplementing the work of heads of school and deans of students, curriculum specialists share an opportunity to create or extend educational initiatives that help students navigate paradoxes in their lives so that they can thrive socially, emotionally, and cognitively today while preparing to listen thoughtfully to others. Encouraging students to be mindfully present with others throughout their school day, 72 percent of heads of school already restrict the use of mobile devices during the day and 14 percent are likely to support restricted usage. Sixty-two percent of heads of school have implemented initiatives cultivating face-to-face communication and problem-solving skills while another 38 percent of heads would support those initiatives. Heads of school express nearly universal support to sustain and enhance face to face interpersonal communication skills. Yet, the task remains to teach students *how* to be in relation with each other. With their utopian and dystopian potential, social media and mobile technology offer students endless opportunities

to create and consume media. Care ethics as developed by Gilligan (1982) and Noddings (1984) offers the best proven and most usable conceptual framework for how people can effectively be in relation with each other.

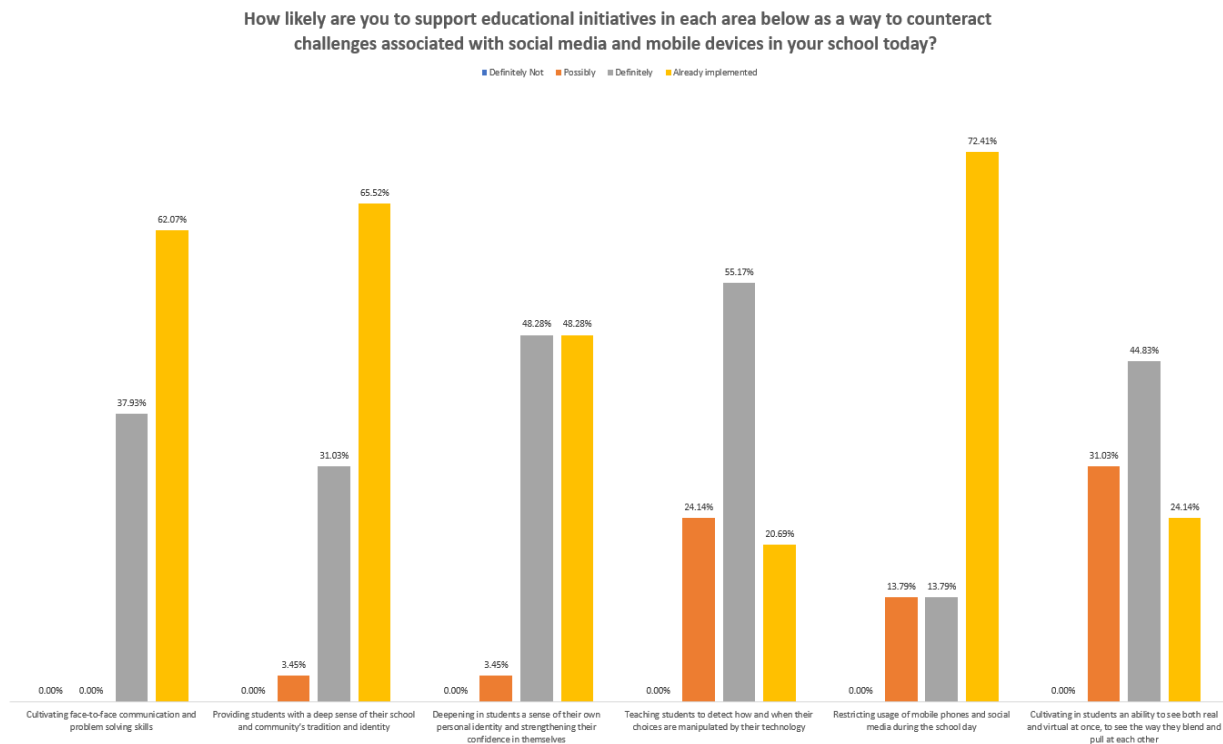


Figure 11. Educational initiatives counteracting challenges associated with social media according to PAIS heads of school

Teaching students how to be in relation with each other on and offline seems like a vital initial step to helping children thrive in schools. The process may help students better understand and navigate the interconnections among their virtual experiences and embodied realities, a sensibility essential to society's long-term thriving and one that today remains underdeveloped. As Ramo explains:

to see both real and virtual at once, to see the way they blend and pull at each other, does demand a new sensibility. And though, eventually, this new instinct will be commonplace, for now at least it must be defined, studied, and learned by each of us. (Ramo, 2016, p. 28)

To this end, 24 percent of heads of school indicate that they already have in place initiatives to cultivate in students an ability to see both real and virtual at once, to see the way they blend and pull at each other; 45 percent of heads expressed that they “would support” the initiative. Twenty-one percent of heads of school currently have in place educational initiatives that teach student to detect how and when technology manipulated their choices; 55 percent of heads indicated that they “would support” the initiative. The data suggest that heads of school share an interest in curricular and counseling tactics that cultivate a deeper understanding in their students of how technology shapes their behavior.

An important way to protect students from the experience of loneliness, anxiety, uncertainty, and depression involves a recontextualized emphasis on their sense of identity. Sixty-six percent of heads of school indicate that they already have initiatives in place that deepen a student’s sense of their own personal identity and strengthen their confidence in themselves. Thirty-one percent of heads expressed a likelihood to support the initiative. Finally, 66 percent of heads of school indicate that the already have educational initiatives in place that provide students with a deep sense of their school and community’s traditions and identity. The data suggest that heads of school share the sense that the paradoxes inherent in students’ real and virtual lives leaves them somewhat adrift and we may use our school to deepen and enhance their sense of self and purpose.

In short, students may benefit from authentic connections, established through care ethics, based in their school communities. Richard Sennett (2006) would likely agree. In *The Culture of the New Capitalism* he describes the changing human experience brought by a shift from industrial capitalism to our interconnected global economy. Three generalized concerns emerge through his interviews with workers in the United States. First, today’s workers experience increased

uncertainty and an absence of coherent life narratives. Second, anxiety accompanies the threat of constant change and need for retraining. Third, past service and commitment to any given cause guarantee no future consideration. He concluded that “the people I’ve interviewed, especially in the past decade, are too worried and disquieted...What they need most is a mental and emotional anchor” (Sennett, 2006, p. 183). In Sennett’s judgment, the disposition most likely geared towards twenty-first century success is “self-oriented to the short term, focused on potential ability, and willing to abandon past experience” (p. 5). What form do mental and emotional anchors take in a system of radical fragmentation where silent actors can manipulate identities that stretch from virtual to real space? This study’s answer is listening practices informed by an ethic of care where empathetic responses sustain the conversation and lead to shared awareness and opportunity.

As an industry, independent schools stand together at a moment of vital reflection. This period of reflexive modernity introduces an obligation to establish greater awareness into technology’s influence in all aspects of students’ lives. From text messages, to social networking sites, to blogs, to cut and pasted homework assignments, to shared multimedia of every form, to engrossing video games, to intensely personal information made painfully public, to cyber-bullying, today’s adolescent faces a set of ontological questions that have stumped many of the adults in their lives. If researchers in the social sciences and education professionals fall short of modeling care ethics, I believe adolescents will move into adulthood with a weakened sense of their collective responsibility for each other and their world. Frederic Jameson (1991) argues:

We are somehow to lift our minds to a point at which it is possible to understand that capitalism is at one and the same time the best thing that has ever happened to the human race, and the worst...as catastrophe and progress all together.(p. 47)

I feel exactly this way about the networking technology reconfiguring students' social and emotional lives and bringing layers of paradox into our school communities. At times it seems that mediated communication has weakened people's sense of responsibility for each other. Missing the opportunity to teach adolescents to be in relation with each other, to learn from and embrace each other's differences, to establish mutual respect and empathetic responsiveness, will leave students adrift and underprepared for the social complexities of their networked lives. Just as the adult American workers in Sennet's research were worried, disquieted, and in need of emotional anchors, so too are adolescents' personal and social interactions that the same networked infrastructure shape.

The moment requires heads of school to evangelize a refined vision for how to understand, engage, and inspire students. Heads of school will benefit from avoiding the temptation to make this conversation about specific technologies or the virtue of how children should behave. Facebook, Snapchat, Instagram, and YouTube, will all eventually give way to the next platforms connecting students and manipulating their behavior. Yet, the fundamental condition across those and future platforms and made possible by networks will remain. Knowing how to care for others proves to be challenging for students even in person, when the consequences of hurtful behavior happen immediately and visibly. The skill proves to be even more difficult when relationships are mediated by technology. Thinking about the problem more broadly, heads of school may consider the role of mediated experience in students' lives. Educators conceptually aware of the "real" power of mediated experience may be better able to empathize with their students' experience. Prior to using *The Matrix* and *Ready Player One* to conceptualize pathways towards replenished communities, I will explore mediated experience as a concept helpful for thinking about ways of caring for students whose challenges are intensely real, but not immediately present. But first, to

tangibly frame the real lives of students involved, I will share a story that started on a typical Friday night in small town U.S.A.

6.0 Exhausted Dystopia to Replenished Communities

“Individual science fiction stories may seem as trivial as ever to the blinder critics and philosophers of today - but the core of science fiction, its essence has become crucial to our salvation if we are to be saved at all.”

(Asimov, 1978, p.7)

6.1 High Stakes Play: Rethinking the Real Power of Mediated Experience

“Jessica...has James been texting you again?” Markus asked as he flipped through her messages. “Yeah. It’s nothing. He’s just being friendly.” Bobby wasn’t so sure. “Let me see,” he said grabbing her phone. Bobby flipped through the messages. Markus and Devin glared over his shoulder. Markus, Bobby, and Devin played squash and hockey. James played football and wrestled. All four boys attended the same small private school and took many of the same classes. Jessica, for the moment, became the focus of familiar rivalries. In her novel, *O Pioneers!*, Willa Cather (1913) writes:

And now the old story has begun to write itself over there...Isn’t it queer: there are only two or three human stories, and they go on repeating themselves as fiercely as if they had never happened before; like the larks in this country, that have been singing the same five notes for thousands of years. (p. 55)

At the end of this Friday evening a generation ago the curtain might have closed on this familiar tableau—adolescent jealousy and territorialism vented but little immediate harm done. In today’s

hyper-connected, always-on, wired generation the same old human stories often take dreadful new shapes, like putting old wine in new bottles only to watch the new bottles explode.

Across town James sat quietly at home, working on a project for school.

PING. Entering the passcode on his phone, he saw one waiting message—a picture. Three boys crowded together. Markus stood at the center with his hood over his head, his eyes and mouth in the shape of a menacing scowl. Bobby and Devin crowded in the frame, glaring with disdain. James stared at the picture.

PING. Another text: WE ARE GOING TO KILL YOU.

Back at Jessica's house the boys ripped into peals of laughter. They checked the phone periodically for the rest of the night but found no response from James.

On Monday morning James's mother stood at the head of school's desk with a stack of papers in her shaking hands. She placed legal-sized papers in front of Dr. Hollinger who recognized the format from a familiar social media app. The message:

WE ARE GOING TO KILL YOU

Sent from Jessica's account with a picture of three boys in hoodies. Dr. Hollinger did not immediately recognize the shadowed boys. "What are you going to do about this? My son will

not return to this school until all three of these boys are expelled. If you don't fix the problem, I'm going directly to the police."

Later that afternoon in a telephone call with Markus's father, Dr. Hollinger faced equal and opposite fury, "what do you mean my son is being placed on indefinite leave? What do you mean you are requiring a psychiatric evaluation? He has a perfect disciplinary record. He made an inappropriate joke through text—does that mean his life has to come to an end? That he suffers the school's death sentence? You've lost your mind. I'll let you know what I decide to do next."

Within months of that occurrence, Dr. Hollinger met with a mother whose seventh grade daughter received from a ninth grade classmate pages of private Facebook messages requesting sex; an alumnus who expressed outrage over current students' social media activities; a mother whose tenth grade daughter's romantic encounter at a classmate's party was digitally and illegally recorded by another classmate; a father who threatened to sue the school over a cyberbullying issue; a teacher who discovered a recently turned viral video of a group of junior girls whose activities hurt the school's reputation; and a sixth grade girl who walloped a boy in gym class with a tennis racket because, as it turns out, she had difficulty relating to him after a sexting episode earlier in the week.

Sorting through complex disciplinary matters, assigning blame, and holding students accountable is standard fare for independent school heads. Yet, while the fundamental nature of the students independent schools serve has not changed during my 20 years in education, technology has complicated virtually every aspect of their lives and our associated responsibility for their development and well-being in and out of school. As danah boyd (2014) suggests, "It's critical to recognize that technology does not create these problems, even if it makes them more visible" (p. 24). I agree and want to extend boyd's assertion to suggest that beyond making these

problems more visible, social media facilitates them and fuels them, at times radically complicating the lives of those affected in ways prior to now educators have not seen or known.

While not all disciplinary issues I have faced in the past decade involve social media and mobile technology directly, networks today accelerate and memorialize minor transgressions that in the past may have been quickly forgotten or never noticed. Embattled students express disbelief over their own choices. Parents ask for relevant theory, or conceptual direction, to understand their sons and daughters' behavior. As one parent lamented, "I don't want another article suggesting I monitor the phone or keep the computer in the family room. I want to know what's going on with my daughter and how we can work together to guide her." How well do parents and educators know students? We have provided them with the most powerful communication technology ever invented and the most addictive applications technologists can create. We share an opportunity now to protect them and to find comprehensive ways to ensure the technology contributes to replenished community rather than exhausted dystopia.

Turkle (2011) writes, "We make our technologies, and they, in turn, shape us. So, of every technology we must ask, does it serve our human purposes?" (p. 19). The technology designed to connect the global economy has borne upon children some unanticipated and harmful side effects. Designers have created tools connecting multinational corporations and those technologies now connect middle school children alone together in their darkened bedrooms late at night. The technological infrastructure has generated a superstructure where children and adolescents have unprecedented access to all forms of information and to each other. I worry about how these rapid changes have impacted their identity development, their emotional well-being, and their sense of responsibility for each other. I worry about the decline of conversation and community. I worry also about how some adults responsible for directing their development—administrators, teachers,

coaches, counselors, physicians, and family members—see them dimly through outmoded lenses incapable of clarifying the furious complexity of their tech-infused lives. If heads of school take the lead, they will start by recognizing that “the key to understanding how youth navigate social media is to step away from the headlines—both good and bad—and dive into the more nuanced realities of young people” (boyd, 2014, pp. 22-23). To be sure, these nuances are not about specific technologies. The subtle understanding of children and adolescents lies in listening empathetically to the ways they make sense of their world, feeling the experience with them, and responding in ways that resonate with and validate their experience.

6.1.1 Daniel Tiger and Metal Nazi Soldiers—The Reality of Toys

The documentary about Fred Rogers reminds people of a powerful form that kind of understanding can take. Released in June 2018, *Won't You Be My Neighbor?* celebrates Mister Rogers' belief that “love is at the root of everything—love or lack of it.” The documentary demonstrates Mister Rogers' unique ability to speak directly to children. He understood that children perceive the world around them quite literally. To connect with them, he went right to the heart of where they were and told simple truths in plain language—no, children cannot fall down the drains in the bathtub. He established this connection frequently through toys—specifically puppets. In one scene, Lady Aberlin, a real person, and Daniel Tiger, a puppet, talk and sing about mistakes. Daniel sings, “sometimes I wonder if I'm a mistake...sometimes I get to dreaming that I'm just a fake...most of the time I'm weak and I'm mild...Often I wonder if I'm a mistake, I'm not supposed to be scared, am I? I'm not like anyone else I know.” The voice is timid and fragile. Lady Aberlin sings in response:

I think you are just fine as you are. I really must tell you I do like the person that you are becoming...I think you are just fine like you are. When you are sleeping, when you are waking, you're not a fake, you're no mistake, you're my friend.

Following Lady Aberlin's solo, the two voices join, each repeating their original lines, but somehow blending, not competing. The voices merge for mutual empowerment, where each individual's sense of self-worth expands. Daniel Tiger's doubt did not magically disappear. Mister Rogers showed the audience that those competing perspectives—unconditional love and self-doubt—can coexist and that there is nothing wrong with Daniel Tiger's feelings. It is a beautiful scene reminding viewers that toys play a literally real role in children's lives and that showing children how to sit with paradox, contradictory feelings in their lives, helps them feel safe in the world.

Today, children's toys include mobile devices, social media apps, and games across a range of platforms. Far from being separate from what is real, those toys shape much of students' reality. To explore the educational implications of what it looks like to take their games and apps seriously as defining elements of their world, it is worth thinking about David Levinthal who played with different kinds of toys that offered a troublingly powerful reality. In 1972, David Levinthal was a Master of Fine Arts student enrolled at Yale University's School of Art. A contemporary of Garry Trudeau of *Doonsebury* fame, Levinthal specialized in photography. As a Jewish child growing up in the 1950's, Levinthal's sensibilities were shaped by countless conversations of horror and heartbreak. Throughout his childhood, his parents and their friends recounted tales of the Holocaust and its aftermath through veils of tears, passing through the house and falling on the ears of a little boy playing with toys in his bedroom. For this generation of Jewish children:

schoolyards and bedrooms strewn with toys were their sites of history, their places where they worked through the whispered terror that still gripped their parents' generation. For it is here, in their play and in the company of toys and make-believe companions, where children first articulate their sense of a vicarious past. (Young, 2002, p. 44)

Given the location of his Holocaust memory, Levinthal chose toys as the subject of his photography. When one of his professors asked him, "why don't you take pictures of the real world, of reality?" Levinthal responded, "These toys *are* my reality!" (Young, 2002, p. 44). As James Young explains:

David Levinthal's memory of the Holocaust was only and always a composite pastiche of television images, toys, and the stories he made up during years of war play. The reality of war and Holocaust was necessarily reduced to the miniature reality of playthings, the intensely felt reality of his romper-room simulations. (p. 44)

For Levinthal and his generation, the simulation of reality—dolls that keep their suitcases packed in case the Nazis arrive, cowboys prepared to defend against the slaughter—function not as simulacra, but as the primary traumatic situation they are meant to signify.

Levinthal's art demonstrates the power and importance of mediated experience. In *Mein Kampf* (1994-1996), Levinthal uses toys produced during the Third Reich as his object. He positions them to evoke actual historical moments crafting a "dramatically staged tableaux of Nazi toy soldiers and their figurine victims" (Young, 2002, p. 45). Levinthal notes that these images "do not capture Holocaust history so much as they do the artist's struggle to capture his own hypermediated reality of the Holocaust" (p. 45). With their focus always slightly in front of or behind the depicted object, Levinthal's photographs create space between the object and its once worldly referent, they force the mind to imagine and thereby collaborate (p. 52). His is the art of

nonintervention and it calls upon viewers to experience the power and importance of vicarious experience, of mediated memory.



Figure 12. Depiction of WWII with toys from Levinthal's *Mein Kampf*

Nearly 80 years prior to Levinthal's work, John Dewey (1916), in *Democracy and Education*, commented on what he saw as an increasingly mediated human experience. Although he attributed educative value to this indirect experience, he warned against accepting representations as ends in themselves. He called for genuine situations and personal participation, modes of engagement not entirely commensurate with the *vicarious* experience that inspires Levinthal's art. The rise and influence of mediated human experience have marked students' lives today, at least in part. Digital networks and powerful computers have made all forms of simulations possible and introduced new paradoxes complicating our experience. Social media platforms including Instagram, Snapchat, YouTube, and Facebook signify new locations of human identity—hubs of our students' social and emotional lives. In coming to know students, educators may find value in paying critical attention to virtual experiences as ends in themselves—as fundamentally embedded in their *real* lives. By counting mediated experience as *real* experience,

a habit of mind required of those viewing Levinthal's art, educators may infuse a bit of Fred Rogers into their work, going exactly to where students are and connecting with them through a more nuanced understanding of their reality.

Dewey could not have imagined at the dawn of the twentieth century a future populous connected by social media and mobile devices, entertained by televisions and video games. He could not have imagined a hypermediated world where vicarious experience may be as good as it gets. Yet, he seemed to hold an opinion on the defining conditions of a world still far from his own. Dewey (1938) would later argue in *Experience and Education*:

Much of our experience is indirect...All language, all symbols are implements of an indirect experience; in technical language the experience which is procured by their means is "mediated." It stands in contrast with an immediate, direct experience, something in which we take part vitally and at first hand, instead of through the intervention of representative media. (p. 272)

Dewey worried about the displacement of the real by mediation. Yet, he also elevated experiences that were immediately agreeable and that positively influenced later experiences without prioritizing future objectives over the present moment. Given Dewey's emphasis on the social nature of experience, would he count tech-mediated social networking as a genuine experience, one that technology mediates but is real at the same time?

While it is impossible to know how Dewey would read contemporary hypermediated reality, it seems likely that he would see technologically-driven vicarious experience as educative, but risky. On the one hand, Dewey (1938) argues that, "Every step from savagery to civilization is dependent upon the invention of media which enlarge the range of purely immediate experience

and give it deepened as well as wider meaning by connecting it with things which can only be signified or symbolized” (p. 272). On the other hand, he suggests:

At the same time...there is always a danger that symbols will not be truly representative; danger that instead of really calling up the absent and remote in a way to make it enter a present experience, the linguistic media of representation will become an end in themselves. (p. 272)

In other words, symbols promote a wider frame of reference, but are not ends themselves by Dewey’s rationale. Yet, a complete valuing of vicarious experience, as exemplified in Levinthal’s hypermediated memory of the Holocaust, establishes the simulation as a legitimate present experience. Levinthal’s trope may also elevate the photographic media of representation as an end in its own right.

Whether *Mein Kampf* represents a legitimate experience or displacing simulation, Dewey would find educative value in Levinthal’s experience only if it were genuine. As Dewey (1938) explains:

Before teaching can safely enter upon conveying facts and ideas through the media of signs, schooling must provide genuine situations in which personal participation brings home the import of the material and the problems it conveys. (p. 273)

It seems that *Mein Kampf* can represent Dewey’s genuine experience at all levels. Deweyan education in the absence of the real, in this moment of our hypermediated reality, must mean that we read vicarious experience and mediated memories as genuine situations reflective of the environing conditions of present experience. Levinthal’s experience with toys expressing Holocaust memory is real. His appropriation of toys from the Third Reich is real. His positioning of those toys in a staged tableau is real. His soft-focus photography is real. Finally, the viewer’s

voyeuristic engagement in his art of non-intervention is painfully real. Accepting the simulacra as an element of contemporary reality, valuing mediated experience as *real* experience may help educators connect with students more effectively and tune their ears to the paradoxes complicating their lives. The need to engage students through care ethics and to model wholeheartedly present listening feels urgent for both their personal well-being and the future of our democracy. I do not say that lightly.

6.1.2 Cosmopolitan Sensibilities in a Mediated World

In his book, *Cosmopolitanism: Ethics in a World of Strangers*, Kwame Appiah (2006) suggests that our interconnected world requires non-judgmental listening and interpersonal attentiveness. Through the shattered mirror metaphor, Appiah suggests that there is no singular truth. Each mirror shard reflects some singular and provisional truth that stands as part of a complex whole. Appiah explains, “so perhaps, when it comes to morality, there is no singular truth. In that case, there’s no one shattered mirror; there are lots of mirrors, lots of moral truths, and we can at best agree to differ” (p. 11). In contemporary society, the mirror shards reflect not only different values, codes, and customs, but degrees of reality, authenticity, and simulation. Today’s world of the shattered mirror is different from Dewey’s, but it was anticipated. Dewey posits:

In the olden times, the diversity of groups was largely a geographical matter. There were many societies, but each, within its own territory, was comparatively homogenous. But with the development of commerce, transportation, inter-communication, and emigration, countries like the United States are composed of a combination of different groups with different traditional customs. (p. 25)

The networked and mediated conditions of contemporary society require the recognition of not only different traditional customs, but also of different levels of reality. In other words, people today live in radical juxtaposition with others, whose value systems may radically differ from their own. Additionally, people live in a world where technology allows individuals to become anything they would like at any moment, a world defined not only by geographical diversity, but by a technologically-oriented diversity allowing individuals to have different versions of themselves in the form of on-line identities or virtual ways of being. Dewey's (1938) call for schools to provide something like a "homogenous and balanced environment for the young...a new and broader environment" (pp. 25-26) seems to be more challenging than ever.

Conversations about Levinthal's *Mein Kampf* may lead people to consider carefully what counts as genuine experience at a time when mediation complicates our notions of reality. It is difficult not to accept Levinthal's Holocaust experience as genuine. By placing a new emphasis on the genuine nature of mediated experience, educators may cultivate conditions where students can form a cosmopolitan worldview capable of valuing all shards of the mirror at once, just as we might see Levinthal's vicarious experience and his parents' actual experience as authentic. In short, educators promote new codes necessary for effective navigation of the networked world. This, Dewey (1938) would argue, is an obligation of schools:

The school has the function also of coordinating with the disposition of each individual the diverse influences of the various social environments into which he enters. One code prevails in the family; another in the street; a third, in the workshop or store; a fourth, in the religious association. As a person passes from one of the environments to another, he is subjected to antagonistic pulls, and is in danger of being split into a being having

different standards of judgment and emotion for different occasions. This danger imposes upon the school a steadying and integrating office. (p. 26)

If the primary ontological boundaries in Dewey's world included the family, the street, the store, and the religious association, the virtual environment or technologically-mediated experience represents one today. Across this latest ontological boundary, there is a new set of unique antagonistic pulls—compulsions, opportunities, and obligations to become a commodity in the virtual marketplace. In this new territory adolescents may develop different standards of judgment and self-presentation across platforms *and* they might choose to interact only with those who agree with their interests.

Through nuanced understanding of this new space of ontological possibility schools can offer a steadying and integrating office, a place where adolescents live and experience the multiple locations of being, and where their capacity for mutual empathy heightens. Conversations about David Levinthal's art present a way of thinking tangibly through the logic. Levinthal's *Mein Kampf* does not deny the possibility of truth, but rather, it suggests that truth is hard to find—located in many places at once. Levinthal's mediated memory of the Holocaust is imperfect, provisional, and incomplete. Yet, it is real, alive, and genuine for David Levinthal. This deliberation foregrounds and indirectly develops cosmopolitan sensibilities. Appiah (2006) explains:

We cosmopolitans believe in universal truth, too, though we are less certain that we have it all already. It is not skepticism about the very idea of truth that guides us; it is realism about how hard the truth is to find...One distinctively cosmopolitan commitment is to *pluralism*. Cosmopolitans think that there are many values worth living by and that you cannot live by all of them...Another aspect of cosmopolitanism is what philosophers call

fallibilism—the sense that our knowledge is imperfect, provisional, subject to revision in the face of new evidence. (p. 144)

Deweyan education in the absence of the real places a new emphasis on the genuine value of mediated or vicarious experience. This is a heterogeneous world that requires multiple codes for successful engagement. The new ways of being that virtual worlds remain underdeveloped at present. Yet this newly ubiquitous electronic social environment stands as the primary reality for some adolescents. Preparing people to successfully navigate the boundaries of virtual worlds does not necessarily require increased instruction in computer applications or programming—although that matters. Nor does it require socializing with them on Snapchat—which is likely a bad idea. Rather, the current envioning conditions call for the development of cosmopolitan sensibilities, a mode of being that emphasizes obligations to others and takes seriously the value of human lives. To this end, educational theorists and practitioners should prepare young people to take an interest in the experiences that lend meaning to the lives of others, even if those experiences take place through the mediation of toys including their technology.

The paradoxes associated with students' networked lives need not necessarily be resolved. Yet, it is necessary to take them seriously and engage them with care. They hang together, reflecting simultaneous possibilities. They underlie the exhausted dystopia some students experience, but they can also be a source of replenishment. Replenished community requires more than the intellectual or conceptual acceptance of difference experienced across electronic networks. It looks more like Mr. Rogers's Neighborhood—an open invitation for people to join and a compassionate recognition of the forces shaping and influencing their worldview, a willingness to listen without judgment and a commitment to care. To this end, schools must help students shape emotional anchors that provide stability across all platforms—virtual and real.

6.2 Free Minds in Trapped Bodies: The Cyberpunk Aesthetic and the Paradox of Virtual Liberation

To conceptualize that kind of emotional anchoring, I use *Ready Player One* and *The Matrix* to demonstrate the exhausted dystopia associated with virtual liberation, then I use Seamus Heaney's "Bogland" to offer a conceptual path towards replenished community. Between the two positions, I contextualize the broader cultural context in which it all unfolds.

In the official trailer for the movie, *Ready Player One*, released in March of 2018, Wade Watts explains, "People come to the Oasis for all the things they can do. They stay because of all the things they can be" (Spielberg, 2018). The film, based on Ernest Cline's 2011 science fiction novel by the same name, presents a dystopian future set in Columbus, Ohio, 2045. In a world ravaged by economic dysfunction, climate change, and disaster, the OASIS offers an escape, a whole virtual universe. Wade Watts's experience illustrates the ambivalence associated with life in virtual worlds. The OASIS's utopian promise of escape from the real world's dysfunction presents several dystopian possibilities. The challenges Wade endures as he crosses from the real world into the OASIS offer helpful insight into complexities that resonate with contemporary viewers. Additionally, viewed through the lens of care ethics, educators might imagine ways of connecting with and understanding adolescents whose lives are meshed through networks and whose virtual experiences complicate their physical realities.

"People need to spend more time in the real world because reality is the only thing that's real," says Wade Watts at the end of *Ready Player One*, "a montage of futuristic dystopianism, retro 1980's kitsch, and virtual reality gaming, all in the form of a Willy-Wonka-esque quest to find a hidden reward in an over-the-top fantasy setting" (Nordstrom, 2016, p. 239). By the summer of 2018, the movie topped the \$500 million global box office revenue. The year is 2045 and the

world is in ruin. Corn syrup droughts, bandwidth riots, and pervasive poverty are part of this world where people have stopped trying to solve problems and hope merely to outlive them. Wade Watts lives in Columbus, Ohio, in the stacks—haphazard columns of trailers where drones deliver pizza, inhabitants spend their time in virtual reality, and advertising is everywhere. Wade lives with his Aunt Alice and her steady stream of abusive boyfriends. The movie offers little evidence of a supportive adult presence in Wade’s life. As Wade explains, “reality is a bummer. Everyone is looking to escape. James Halliday gave us someplace to go.”

The OASIS (Ontologically Anthropocentric Sensory Immersive Simulation) provides the location for their escape—their virtual liberation. James Halliday, a reclusive genius, created the massive simulation that eventually became the location where people spend most of their time. Near the movie’s opening we learn that Halliday has died and created a game to determine who would inherit his half-trillion-dollar fortune and gain control of the entire OASIS. He has hidden an Easter egg somewhere in the OASIS and Wade Watts accepts the challenge to find it. The movie offers useful ways to think about not only the far-reaching implications of students’ technological saturation, but also what that experience feels like today:

The recurring question in Cline’s novel is whether online games like the OASIS enhance or reduce interpersonal communication, education, and social interaction. Both Wade and Halliday long for isolation and escape from the ‘real world,’ seeing the OASIS as their refuge from emotional pain and the hardships of everyday life. (Nordstrom, 2016, p. 245)

Despite its simpler conclusion that ‘reality is the only thing that’s real,’ the movie ultimately complicates what reality means in the first place.



Figure 13. Advertisement poster for 2018 movie, Ready Player One

As a former English teacher turned head of school, a great joy of the work happens serendipitously during my walks through campus, discovering new authors who have captured my students' imagination. Every book presents an opportunity to start a conversation, "oh wow...that book looks interesting—tell me about it." These days, science fiction and fantasy reign supreme. This comes as no surprise. During my time teaching sophomore English, students dutifully made their way through the early American writers and they put up a good fight with the Realists and Modernists, but they devoured the Romantics and Postmodernists. Verisimilitude or fragmented perspectives did not excite the students. Rather, I found the students fascinated with alternative worlds—particularly broken ones. Dystopian film and fiction matter to them because:

with its capacity to frighten and warn, dystopian writing engages with pressing global concerns: liberty and self-determination, environmental destruction and looming catastrophe, questions about identity, and the increasingly fragile boundaries between technology and the self. (Basu, Broad, & Hintz, Introduction, 2013, p. 1)

In short, dystopian aesthetics precisely provide the right materials to provoke the ontological conversations essential to develop the critical capacity to question the forces shaping their world and the paradoxes that emerge from them.

Yet, for the most pressing concerns of the day, a dystopian aesthetic encourages directly relevant conversations about our humanity relative to the technology that permeates our lives. Movies including *Ready Player One*, *The Matrix*, and *Blade Runner*, books such as *Neuromancer*, *Snow Crash*, and *Eye of Minds*; and television shows including *Mr. Robot*, *Westworld*, and much of *Black Mirror* fit into the cyberpunk genre, an aesthetic form interested in exploring our humanity relative to technology. So, what is cyberpunk? McHale (2010) suggests the question itself is wrongheaded, but there does exist a shared cyberpunk poetics. First:

Both science fiction and mainstream postmodernist fiction possess repertoires of strategies and motifs designed to raise and explore ontological issues. Here is the ultimate basis for the overlap between the poetics of postmodernist fiction and SF poetics in general, including cyberpunk poetics in particular. (pp. 6-7)

In cyberpunk, those ontological issues emerge through a variety of tropes including the juxtaposition of multiple world spaces or zones. McHale (2010) explains, “all these spaces...are instances of what Michel Foucault called ‘heterotopia,’ the impossible space in which fragments of disparate discursive orders (actualized in cyberpunk as disparate microworlds) are merely juxtaposed, without any attempt to reduce them to a common order” (p. 9). These maximally diverse and heterogeneous cultural materials, hanging together without attempts at reconciliation, provide opportunities to explore the structural symptoms of networks.

In *Ready Player One*, Wade Watts explores these multiple worlds as Parzival—his OASIS avatar. The OASIS offers possibilities limited only by the imagination. Wade explains, “you can

do anything, go anywhere — like the vacation planet. Surf a 50-foot monster wave in Hawaii., you can ski down the pyramids, you can climb Mount Everest with Batman...People come to the OASIS for all the things they can do, but they stay because of all the things they can be. Tall, beautiful, scary, a different sex, a different species, live-action, a cartoon — it's all your call.” The OASIS allures users with captivating virtual worlds and endless possibilities within those worlds. Additionally, the OASIS provides participants with opportunities to earn coins that lead to increased levels within the games on various worlds. Avatars killed within the game lose all that they have earned.

Cyberpunk science fiction encourages generative conversations about the conditions and creation of worlds and the complexity of self(s) moving within and among those worlds. McHale (2010) explains,

Postmodernism's shift of focus to ontological issues and themes has radical consequences for literary models of the self. A poetics in which the category “world” is plural, unstable and problematic would seem to entail a model of the self which is correspondingly plural, unstable, and problematic. If we posit a plurality of worlds, then conceivably “my” self exists in more than one of them; if the world is ontologically unstable (self-contradictory, hypothetical or fictional, infiltrated by other realities) then so perhaps am “I.” (p. 13).

Cyberpunk's capacity to help students explore multiple selves functioning within and throughout their networked lives may help students perceive their current circumstance more clearly. Conversations sparked by Parzival's passage through plural, unstable, and problematic worlds may help educators guide students through the kind of confusion leading them to say, “I don't know why I did that.” Specifically, the language of care ethics would have educators ask the question, “What are you going through?” with engaged curiosity and empathetic listening. By asking the

question with the hope to be part of the other person's world, educators create greater connection with the other person, establishing familiarity with an otherwise powerful yet inaccessible aspect of their reality.

In Wade Watts' world, "The lines of distinction between a person's real identity and that of their avatar began to blur. It was the dawn of new era, one where most of humanity now spent all of their free time inside a videogame" (Cline, 2011, p. 60). As an aesthetic form whose powers point directly at our technological moment, cyberpunk science fiction offers new ways to conceptualize several of the network-based paradoxes many heads of school have observed. Awareness of the genre's conventions may help school leaders see the broader context of these paradoxes and the associated emotional toll on students. Cyberpunk matters because it invites "a radical interrogation of the virtual technologies at work in contemporary society" (Downham, 1988, p. 38) and through this interrogation, educators might help students understand more fully how to navigate the paradoxes they face online. The conversations may also help heads of school see them more clearly, fulfilling the promise to know students.

6.3 The Escape Hatch Paradox: Utopia Within Dystopia

The allure to explore possible worlds and build new ones from the rubble of those that have fallen makes sense for adolescents awakening to the corruption and hypocrisy surrounding them. As Balaka explains:

Uncovering the failures of the dystopia often means leaving aside childhood and confronting the harsh truths of the adult world...this awakening often included a realization of how ruined the adult world has become: kids learn adults are lying, their parents have

problems, the system can't protect them, they have to take care of themselves, and so on.

(Basu, Broad, & Hintz, 2013, p. 7)

Nordstrom (2016) notes: "in the real world, Wade is abused, orphaned, lonely, and hopeless. But, in the OASIS, he enjoys school, excels in many classes, hangs out with friends" (p. 240). His physical body exists in squalor and poverty. In the original novel, Wade describes his home:

My aunt's trailer was the top unit in a "stack" twenty-two mobile homes high, making it a level or two taller than the majority of the stacks immediately surrounding it. The trailers at the bottom level rested on the ground, or in their original concrete foundations, but the units stacked above them were suspended on a reinforced modular scaffold, a haphazard metal latticework that had been constructed piecemeal over the years...a sprawling hive of discolored tin shoeboxes rusting on the shores of I-40. (Cline, 2011, pp. 21-22)

When he is not in the OASIS, this is Wade's world. He sleeps on a mattress above the trailer's washing machine. He copes with his aunt's nasty boyfriends. He climbs through piles of abandoned and stacked cars to reach his one safe place—a van hidden from the world through which he enters the OASIS. Although relating to this exact form of life would be difficult for many, adolescents can certainly relate to failures within their world. Policies of home and school that feel limiting, peer dynamics that turn disruptive, frustration with teachers, boredom with the routine of life, uncertain opportunities ahead, all send adolescents looking for their escape hatch. Social media and mobile technology offer an ever-present and ubiquitous passageway to new worlds. In cyberpunk, cyberspace functions as a world within a world, allowing characters to move from one ontological plane to another, via some technological device, a gesture highlighting the "worldness" of world. This feature of cyberpunk science fiction has the potential to help

networked teens think critically about the conditions giving rise to their networked experience, to explore the idea that every coding decision has a real-world impact on their desires and actions.

Dystopian young adult film and fiction generally—and cyberpunk in particular—are worth attention not only for what they may say to educators and students, but for what they can get us saying to each other about individual and collective identities across networks. Educational outlooks informed by reflexive modernity extend into the conversation about social media and mobile technology for reasons that warrant attention. Notably:

The introduction of computer technology has increased the fissures in the construction of self, because digitalization increases the oscillation in the planes of becoming that got to make up the learning process. In a sense, the analogue certainties of educational humanism are replaced by the digital uncertainties of a computerized learning experience. (Cole, 2006, p. 163)

Ready Player One may help school leaders conceptualize trend lines to the future, but more importantly the story helps them see who they are in the present. Theoretically informed conversations provoked by dystopian narrative have the potential to help shape new ways of understanding how technology complicates identity development and to help educators more clearly see a population who are strangers to themselves as they come to construct themselves more clearly. For Wade Watts and many students, the dystopian conditions underlying virtual reality always compromise the escape to virtual utopia—a utopia within dystopia where the perceived perfect virtual world contributes to real world exhaustion.

Ironically, in Wade's fictional world and in the real one, the liberation promised by virtual worlds twists into its own form of exhausted dystopia. For Wade the OASIS places users at dystopia's edge with the risk of IOI agents taking over the system for purposes of their own profit

and users being too inured to resist any form of concurrent mind control. For Wade, the OASIS offers an alluring platform to connect with friends and escape from real world pain and boredom. Simultaneously, the simulation extracts his attention, keeping him plugged in, contributing to the disregard of his offline community, and promoting an apathetic indifference to the bleak conditions of his real life. These paradoxes underlie the exhaustion and “Perhaps the most paradoxical facet of *Ready Player One* is characters’ changing perceptions of the OASIS itself. While Halliday and Wade initially view the OASIS with optimism, even reverence, Cline also presents a perspective of the OASIS not as a haven but as a corrupting influence, nurturing isolation and global indifference” (Nordstrom, 2016, p. 245). Halliday comes to believe that the OASIS evolved into something horrible and Wade agrees:

I’d come to see my rig for what it was: an elaborate contraption for deceiving my senses, to allow me to live in a world that didn’t exist. Each component of my rig was a bar in a cell where I had willingly imprisoned myself...In real life, I was nothing but an antisocial hermit...I was just another sad, lost, lonely soul, wasting his life on a glorified video game.
(Cline, 2011, p. 198)

Absent adults in his life to support him, Wade processed this experience entirely on his own. Guided by care ethics, educators today committed to being wholeheartedly present with students, to listening to their experience, will be most effectively positioned to help students remain empowered in their own lives. Perzival eventually discovers the unintended consequences of life lived inside the OASIS and he desires to escape. Although it has been nearly 20 years since *The Matrix* (1999) hit theaters, Neo’s epiphany is not unlike Perzival’s.

6.3.1 Enter the Matrix

Throughout his life, Thomas Anderson had a sense that something was not quite right with his reality. While he could not imagine its form or purpose, he could perceive it through glitches in his world. Thomas Anderson uniquely felt the presence of the Matrix all around him, a capacity leading Morpheus to pursue him as humanity's savior from the simulation's bondage. Morpheus explains to Thomas Anderson, "you are here because you know something...you can't explain it, but you feel it...there is something wrong with the world, and like a splinter in your mind it drives you mad." The Matrix, Morpheus explains further, is the "world that has been pulled over your eyes to blind you from the truth that you are a slave born into bondage, born into a prison that you cannot smell or taste or touch—a prison for your mind." This conversation and the entire consensual hallucination play out in Thomas Anderson's mind, trapped in an atrophied body in an energy tower. His body is a battery providing energy for machines that have enslaved humanity. Determining that Thomas Anderson is the One, Morpheus extracts his physical body from captivity and systematically helps "Neo" see the virtual prison of his mind.

To liberate himself and others from The Matrix, Neo must learn to "see all the screens at once, in their radical and random difference"(Jameson, 1991, p. 31), he "must simultaneously see the virtual reality of The Matrix, the underlying code that writes and informs it, the bodies that are confined by it, the minds that are controlled by it, and the machines that generate it" (Barnett, 2000, p. 369). At the film's conclusion, pursued by sentient agents coded to eliminate him from the system, Neo faces his greatest threat. Three agents open fire, hurling dozens of bullets at his body. In that moment, after all his training, Neo sees the agents in their virtually real form and in the language of The Matrix code simultaneously. No longer confined by the system's logic, he calmly holds his hand up to the bullets. In that moment, they hang before him. He plucks one

from the air, looks at it, and drops it to the floor. Neo discovers that his being and identity extend far beyond the simulation confining him. He no longer would comply with its conventions and in this defiance, he experiences his own liberation.



Figure 14. Climactic scene from the film, *The Matrix* (1999)

Parzival similarly defies the conventions of his world to begin his own journey towards liberation. Halliday constructed a race as the challenge leading to the first key to discovering the Easter egg, but after five years, nobody has won. With a packed field at the starting line, the system's liquid architecture simulates the Brooklyn Bridge. Beset with obstacles, the course beyond the bridge throws virtually everything at the racers—runaway trains, busted bridges, wrecking balls, truck-sized potholes, perilous bends at breakneck speeds, a tyrannosaurus rex stomping across China Town, and King Kong jumping from buildings to the road and back again grabbing and crushing any vehicles that near the finish line. Perzival has followed this course of futility countless times. Until he remembers, *Halliday hated making rules*. Returning to the Halliday archives, he uploads a scene where Halliday says, “why can’t we go backwards for once—really fast. Put the pedal to the metal.” At the starting line of the next race, Parzival breaks the rules. Instead of following the code’s expectations, he puts the pedal to the metal, driving in reverse towards a concrete wall that *just-in-time* gives way to a ramp. Parzival rides the road beneath the standard course in reverse until he reaches the finish line.

Both *The Matrix* and *Ready Player One* suggest the value of understanding how any system's logic and rules conditions our minds and shapes our experience. Both suggest the possibility of liberation from a given system by fully understanding exactly how the machine does its work on those connected. In conversation with students in this cultural moment, educators focused on mutual empowerment through empathetic listening can support students' discovery of controls within their networked lives manipulating their behavior and conditioning their choices. To be sure, unplugging from the system represents a form of personal empowerment. Additionally, learning to use the system rather than being used by the system proves to be an important distinction that adolescents need help developing.



Figure 15. Scene from the movie, Ready Player One

6.3.2 Screen Time, Exhaustion, and Replenishment

As educators seek to understand and support students' navigation of the paradoxes associated with their networked lives, it may be useful to put a bit of pressure on the idea that "people need to spend time in the real world because it's the only thing that's real." At *Ready Player One*'s conclusion, Parzival reveals that as the OASIS's controller, he will shut the

simulation down every Tuesday and Thursday. While the gesture's spirit feels good, it does nothing to address the paradoxes people face within the narrative or that students face in real life. The simplistic approach suggesting adolescents turn the phones off and "spend more time in the real world because that's the only thing that's real" has some value. A correlation exists between the amount of time adolescents spend on line and the anxiety and depression they feel (Elhai, Dvorak, Levine, & Hall, 2016). Jean Twenge (2017) notes:

Eighth graders who spend 10 or more hours a week on social media are 56 percent more likely to say they're unhappy than those who devote less time to social media. Admittedly, 10 hours a week is a lot. But those who spend six to nine hours a week on social media are still 47 percent more likely to say they are unhappy than those who use social media even less. The opposite is true of in-person interactions. Those who spend an above-average amount of time with their friends in person are 20 percent less likely to say they are unhappy than those who hang out for a below average amount of time. (para. 12)

Yet, the research is less conclusive on whether the relationship is causal or if depressed adolescents simply spend more time online. Additionally, even while unplugged, the world of social media rages on and the real-world effects of virtual-world drama prove to be inescapable.

The real risk lies in being satisfied with the naïve assumption that less screen time will ameliorate their problems. In other words, even when teens are unplugged, a robust social reality rages on for their continually connected friends. Being completely unplugged represents the equivalent of social death for many adolescents, a potential source of anxiety and isolation. As Dennis-Tiwary (2018) explains:

Teenagers are struggling with anxiety more than any other problem, and perhaps more than ever before. There's a good chance that it is anxiety that is driving teenagers (and the rest

of us) to escape into screens and to flee their fears. Across most types of anxiety runs a common thread—difficulty coping with feelings of uncertainty. (para. 7)

The article describes three major uncertainties contributing to teens' anxiety. First, they lead uncertain economic lives where their future job prospects feel unclear. Second, they experience uncertain truths where social media platforms place all users on an even plane to make whatever claims they choose. Finally, they endure uncertain independence where overly-anxious parents rescue them from frustration and disappointment leaving them ill-prepared to solve problems for themselves. School leaders interested in creating conditions where children and teens thrive may find value in framing all of these as problems introduced or accelerated by digital networks, unintended consequences of society's technological progress. Hence, while mobile devices may not be the source of their anxiety, their radically changed world—of which phones are a part—fuels their distress.

Looking at the trendlines extending from the current cultural moment, it feels like educators are at the leading edge of an ontological revolution, a turn that may inspire school leaders to think first about *who our students are* before deliberating over *what they did*. Turkle (2011) theorizes what happens when lives unfold simultaneously in virtual and real spaces. She writes:

When Thoreau considered “where I live and what I live for,” he tied together location and values. Where we live doesn't just change how we live; it informs who we become...What values, Thoreau would ask, follow from this new location? (p. 277)

Where people live informs who they become and the hybrid envioning conditions—real and virtual spaces—of lives require new ways of understanding and supporting children and adolescents. Neo and Perzival ultimately decided that existence in virtual reality amounted to a simulated life. Neo sought to dismantle this system entirely. Perzival decided that shutting it

down temporarily from time to time was replenishing enough. By seeking to be part of students' world, educators can support their process of developing personal empowerment within and across networks.

Mobile technology is ubiquitous and whether students are on or offline, networks shape much of their social and emotional lives. The rise of anxiety and depression in children and adolescents at our schools suggests the experience has elements of exhausted dystopia. By exhausted I mean *used up*. The tension associated with navigating the paradoxes shaping their lives extracts or depletes their time, attention, and emotion. Many students do much of this processing without intentional adult support. Characterizing the experience as dystopian suggests both a world complicated by technology's influence where thought control and the rise of strongman politics is possible, and an invitation to take comfort in the consensual experience of lamenting the circumstance while imagining no viable alternative. As the conditions give rise to real world consequences, most everyone feels at least a dose of the fatigue, including school leaders expected to sort it all out while preserving their schools' nurturing and educative climate and culture. Prior to imagining possible pathways out of this conceptual exhausted dystopia, I would like to contextualize the experience in the broader conversation about globalization and postmodernity, ideas that will help demonstrate why a turn "inward and downward" may lead to replenishment.

6.4 Postmodernism and Globalization: The Broader Context of Networked Lives

Although networks have brought a series of paradoxes to schools, they have also contributed to the broader cultural shift associated with globalization and the cultural logic of late

capitalism (Jameson, 1991). The logic underlying network-based paradoxes in students' lives is not unlike the logic associated with the cultural trends emerging from our increasingly networked world. For nearly half a century, the assumptions and predispositions of postmodernism and poststructuralism have influenced a range of disciplines including architecture, politics, and education. The postmodern architect creates new structures by combining diverse styles and forms, recognizing ironically that nothing original exists (Venturi, Izenour, & Brown, 1977). Poststructuralism offers a handy toolkit for dismantling political discourse and revealing the spectacle of performance (Smith, Miller-Khan, Heinecke, & Jarvis, 2003). Postmodern educators need to consider the possibility that progress itself, perhaps schools' fundamental *raison d'être*, is an illusion (Lyotard, 1983). In the postmodern moment, people speak words like "tradition" with a wink and a nod. They say tradition, but what they really mean is just another narrative, unable to capture the essence of a place because truth is partial, identity is fluid, language is an unstable system of signs, and labels are always coercive.

Implicitly driven by postmodern impulses, some contributing to this cultural moment have ripped apart familiar fairy tales and playfully complicated fundamental ideals including truth and beauty (Carter, 1980). Much of this complicating has been beneficial. Postmodern ways of knowing have provided useful tools to challenge oppressive circumstances in the context of gender (Butler, 1991), sexual identity (Foucault, 1978), economic stratification (Althusser, 1971), racial marginalization (Lorde, 1984), and ethnic othering (Said, 1978). Indeed, the form of this dissertation would likely not be possible if not for postmodern skepticism of narrowly defined truth claims. Yet, for all the gains brought by liberation from oppressive structures, I worry that the deconstruction of reality, leaving fragments of tattered facts once seen as coherent, may feel far too confusing for students in need of some social and emotional anchoring. W.B. Yeats wrote

in “The Second Coming,” “things fall apart; the centre cannot hold” (Yeats, 1996/1919). Today’s response may very well be, “The center has always been an illusion; let’s play on what we thought were the margins.” In an era of globalization, when the vast complexity of the world system connects all participants in a sprawling rhizome (Deleuze, Guattari, & Massumi, 1987), there is no limit to the combinations and recombinations of human identity and experience. All that we know for sure, so the story goes, is that nothing is for sure. These are likely not the conditions Dewey (1938) had in mind when he called for a “homogenous and balanced environment for the young” (p.p. 25-26).

Providing a broader cultural context for the rise of networks, postmodernism’s procession has influenced the behavioral norms and codes of youth culture. While some periods of human development bring greater biological change, adolescence marks a defining moment when individuals make conscious decisions about their sense of place and purpose in the world. Postmodernist assumptions and predispositions have widely influenced schools and popular culture, complicating individual capacity to develop a coherent sense of place and purpose. Anti-essentialist notions of identity (Cixous & Clement, 1986), standpoint epistemologies (Harding, 2003), and the blurred line between human and mechanical experience (Haraway, 1990) are simultaneously generative and destructive. Cultural theorists and scholars have advocated for the liberation from so many socially constructed limitations *and* complicated the sturdy—although limiting—moorings for the anchoring of individual identity, an absence that adolescents whose identities are under construction uniquely and remotely experience.

Questioning the legitimacy of metanarratives proves to be a small but defining symptom of postmodernity. In what may be the cornerstone of all postmodernisms, Jameson (1991) argues that the first and most evident feature of the postmodern moment is “a new kind of flatness or

depthlessness, a new kind of superficiality in the most literal sense, perhaps the supreme formal feature” (p. 9). The centered-subject, according to Jameson, is gone and a subsequent waning of affect has liberated the individual not only from anxiety but from every other kind of feeling as well, “since there is no longer a self present to do the feeling” (p. 15). In Jameson’s formulation, this postmodern sensibility marks a turn away from the modernist thematics of alienation, solitude, and social fragmentation portrayed in Edward’s Munch’s painting *The Scream*, an image now appropriated by *The Simpsons* and a host of corporations for advertising purposes. Shock, in other words, is dead.

The broader cultural conditions surrounding the work of educators require school leaders to be savvy about technology, resisting the explicit reduction concluding *Ready Player One*: “people need to spend time in the real world because it’s the only thing that’s real.” Although the message has value and people who follow it might benefit in some ways, doing so does not address the paradoxes besetting students’ lives and affecting school communities. Heads of independent schools, whose meaningful connections with all constituents are a business imperative, share the opportunity to take the lead thinking critically about social media and mobile technology’s impact on students’ lives and to seek ways to counteract a set of associated challenges including the apparent impossibility of a coherent life narrative. Bauman (2007) compellingly argues that adolescents active on social networking sites “are simultaneously *promoters of commodities* and the *commodities they promote*. They are, at the same time, the merchandise and their marketing agents, the goods and their traveling salespeople” (p. 6). To this end, they must catch the attention and demand of consumers—ironically, their friends. In other words, to be a subject in the world of mesh networks, participants must first become an object. Moreover, to be attractive commodities, individuals must constantly upgrade because:

The consumerist culture is marked by a constant pressure to be someone else. Consumer markets focus on the prompt devaluation of their past offers.... changing identity, discarding the past and seeking new beginnings, struggling to be born again—these are promoted by that culture as a duty disguised as a privilege. (Bauman, 2007, p. 100)

Although the shock associated with outcomes of these conditions may be dead, anxiety and depression are not. Perhaps more than ever, schools organized around a coherent mission and identity, notably independent schools, can serve as a stabilizing presence in their students' lives. Yet, to be a stabilizing influence, schools need to provide children with adult teachers and mentors committed to actively listening to their experience and responding in ways that resonate with their experience and extend the conversation. "Help me understand what you're going through," feels like an ideal way to begin.

6.4.1 Globalization and Liberation through Community

There is a broader and related conversation underway about the intensifying tension between nationalism's promise of a cohesive community and globalization's pursuit of universal human rights. The nationalist seeks to close ranks, build walls, and draw on the internal strengths that bind a nation, whereas the globalist embraces a much broader sense of humanitarian responsibility. Networks connecting culturally, ethnically, and religiously diverse people have heightened the urgency of this conversation. As Ramo (2016) explains:

The real contests ahead will concern networks—but this means, in fact, a deeper conflict over values. Networks are like churches or schools or congresses; they reflect the aims and ethics of the people who build them. The price of meshing so many passionately held aims and sensibilities, hopes and hatreds, will be high. We can already see how wrong the

idea of easy globalization, once promised to us, has become. National identities, religions, biases—these aren't erased by connection. They are merely (and dangerously) linked. (p. 52)

To sit with these conflicts and associated paradoxes constructively and meaningfully, individuals require new ways of seeing themselves, others, and the system that shapes the entire experience. To realize globalization's promise and minimize its peril, educational researchers and school leaders need to equip young people with new frameworks for making sense of themselves and others. The survey of PAIS heads of school reveals an interest to pay closer attention to students' ontological struggles, to the reality of their being and the conditions creating it.

The technology driving late capitalist culture and facilitating globalization has introduced a series of paradoxes shaping students' lives and contributing to distress. Ironically for some, the dizzying consequences of fast communication technology create nostalgia for the good old days of industrialization. By today's standards those old factories seem to be a model of solidarity. Although conditions of the old steel towns were harsh, people were also physically interdependent in neighborhoods. They walked the same streets, shared the same water, entered the same factory gates, and stood shoulder to shoulder against shared injustices. Moreover, cultural institutions (notably schools) could plainly see their obligations to help the children that they served. The need for social reform is self-evident when a child, physically broken by industrial machinery, enters your classroom. Yet, what are the signs that the infrastructure of multinational capitalism has harmful effects on our students today? Unlike children of the industrial revolution, no one has forced young people to operate the machinery driving this phase of capitalism. Yet, that machinery drives their social lives just as it drives global commerce. The effects are not self-evident.: their

bodies are not battered and their clothes and faces are not stained with coal dust. Yet, their minds process endless ambivalence.

The price of meshing so many passionately held aims, sensibilities, hopes, and hatreds, has been high. This is true not only for nations, but for individuals—particularly children—sitting with paradoxes that prove to be a fundamental condition of networked lives. Moving beyond exhausted dystopia means not only taking comfort in the community of others who lament the condition, but also creating replenishment beyond it. Imagining what form that replenishment can take for students begins with understanding globalization’s primary tensions: “Globalization refers to the rapidly developing and ever-denser network of interconnections and interdependences that characterize modern social life” (Thomlinson, 1999, p. 2). Meshed connections inevitably lead individuals, organizations, and nations to implicitly or explicitly converge or diverge in customs and standards. As Singh, Kenway, and Apple (2007) explain:

In this regard, one focus is on processes of detraditionalization, particularly the loss of traditional institutional formations and anchors of identity. Another interrelated focus is the processes of re-traditionalization involving new inflections of traditional social and cultural forms and identifications. (p. 4)

Like nations connected across the globe and businesses connected across the country, heavily meshed independent schools face a similar choice—converge to the point where NAIS member schools look like part of a franchise or diverge to retain and deepen our unique attributes often bound to schools’ local opportunities. For the most part, NAIS schools have done both—following NAIS’s “Principles of Good Practice,” by applying them in locally-relevant, tradition-oriented ways. Like the citizens of a nation, students in NAIS schools can anchor their identities in part to the traditions and core values celebrated at these schools.

Heads of school can cultivate replenished communities through care ethics emphasizing mutual empowerment. Students experiencing anxiety associated with paradoxes in their networked lives need adults committed to non-judgmental listening. Heads of school can model those conversations, inviting students to authentically describe the practical and emotional exhilaration and fallout from their experience. Educators will benefit from better understanding these conditions and students will benefit from the chance to explore them without fearing responses that shut conversations down before they begin. The matter feels urgent as enclaves of hate harden across the Internet. Singh et al. (2007) explain:

People's relationship with life and each other are being organized around a complacent, calculative, self-centered understanding of the world...Crises of alienation, disaffection, and depression are manifestations of the stresses and strains manufactured by "globalization from above." (p. 16)

The broad and pervasive structural systems of globalization shaping social interactions and business relationships contribute to chronic anxiety for increased numbers of people where consumers worry if they have made the right choice and businesses struggle to retain customer loyalty. Champions of the free market will argue that this new reality makes all enterprises better: networks have increased competition and access to alternatives. Although this is true to a certain degree for all businesses—including independent schools—the matter proves to be a bit more complicated in the education sector, where the guiding question in consumer culture, *does it make you happy*, does not always prove to be the best test question for whether things are going well.

Community replenishing educational practices accounting for the paradoxes associated with networked lives and attentive to students' social and emotional needs may begin by inviting students and parents to join educators in laying bare the way networks—specifically social media

and mobile technology—have introduced new locations of anxiety into our lives. To this end, educators may move beyond “digital citizenship,” evoking tension over those who belong and those who don’t, and advocate for “digital humanitarianism,” emphasizing the dignity and worth of all people. As society witnesses people hardened by hate validated through social media’s corrosive echo chambers, I sense the long-term project of teaching people to listen in the digital age as a vital step. I wonder if those who seek to harm others, who have been radicalized through the validation of hate, might proceed differently if they were listened to and taught how to listen to others when they were young. As Singh et al. (2007) posit:

Responsive education is not only concerned to engage students in investigating the risks posed by the ideological project of “globalization from above,” but to enable them to construct opportunities for innovation, making the nodes within the alienation and disaffection of resentment politics available for creative, constructive, community formation. (p. 133)

Collectively, school communities may benefit from exploring the structural underpinnings of behaviors and dispositions ascribed to adolescents after the rise of networks. The research community has defined them as overindulged (Kindlon, 2003), narcissistic (Twenge, 2007), entitled (Alsop, 2008), overprotected (Mogel, 2001), disrespectful (Rigby, 2006), and impulsive (Walsh, 2005). To the degree these generalizations are true, they reflect the fear and anxiety families feel. School leaders can either commiserate in exhausted dystopia, or they can replenish communities by elevating the better angels emerging from students’ networked experience and listening closely to how they describe the emotional collateral damage they have endured.

More specifically, knowing that networks will continue defining the virtual and real landscapes of students’ social and emotional lives, heads of school may create space for those

positive behaviors to flourish. Through engaged listening practices, educators will learn more about the good that works through networks and elevate the experience. This approach aligns with Italo Calvino's (1974) suggestion in *Invisible Cities*:

The inferno of the living is not something that will be; if there is one, it is what is already here, the inferno where we live every day, that we form by being together. There are two ways to escape suffering it. The first is easy for many: accept the inferno and become such a part of it that you can no longer see it. The second is risky and demands constant vigilance and apprehension: seek and learn to recognize who and what, in the midst of inferno, are not inferno, then make them endure, give them space. (p. 165)

Replenished community may benefit from an elevation of life enhancing realities made possible by networks. School leaders share an opportunity to help children and adolescents productively navigate the paradoxes associated with their networked lives. Although many students have found their lives painfully complicated by social media and mobile technology and many heads of school have observed concurrent disruptions to student life and school culture, movement forward may begin with clarity around hearing what is going well and connecting those virtues to PAIS schools' mission and overall purpose.

This moment of reflexive modernity, where educators witness and experience the unintended consequences of technology's progress, requires meaningful and intentional conceptual grounding. Heads of school share an opportunity to help children and adolescents see and understand their world more completely, to develop new master keys for life in the digital age. I believe that a shift from the platitudes associated with virtue ethics towards the social engagement of care ethics offer those keys. In addition to teaching them how to use specific applications and devices, educators may help them conceptualize what it means to use them in the first place and

how that very act shapes their world. Educators can help them make sense of the limitations and opportunities presented by the devices and programs that shape their reality and form their interactions. Through engaged listening educators can encourage students to ask critical questions about those conditions. Educators can support students' efforts to think simultaneously inside and outside the systems shaping their social and work relationships. In short, heads of school can achieve a more comprehensive response to any parent's hope for something more foundational than "another article suggesting I monitor the phone or keep the computer in the family room." Heads of school can strategically develop students' capacity to hear, understand, and process differences among people with whom they are connected. Through this awareness they might enter the adult world able to thrive, capable of achieving a sense of solidarity and shared purpose within networked communities.

The paradoxes complicating students' lives contribute to behaviors and experiences inconsistent with the types of community that networking technology conceptually should make possible and that independent schools promise—forms of responsibility for each other that researchers including Maxine Greene suggest should be a priority. Digital networks have bound people together but come with no clear instruction manual on how to use those connections to lift each other up instead of tear each other down. Additionally, economic conditions brought by globalization have complicated, at least in the West, conceptions of self and other, friend and foe. Networks force educators to revisit their responsibility to love our neighbors as ourselves with renewed understanding. Educators are left to explore with students who within the networked publics that we have created counts as my neighbor and what form can new concepts of cosmopolitan solidarity assume.

In *The Dialectic of Freedom*, Maxine Greene (1988) suggests our most meaningful liberation comes within and through our connection with each other. Greene complicates the notion of radical individualism as the heart of American freedom. She challenges the transcendentalist assumption that autonomy and heightened consciousness of the individual could bring freedom, suggesting instead that it is no longer possible for “Americans to assert themselves to be ‘free’ because they belong to a ‘free’ country. Educators need empowered themselves to create their own identities within a plurality; they need continually to make new promises and to act in our freedom to fulfill them, something they can never do meaningfully alone” (Greene, 1988, p. 51). Greene defines freedom not in terms of isolation from others, nor refusing to share other people’s values, nor the rejection of lifestyles forced upon individuals. Rather, she defines freedom by a sense of community, connection, compassion, and obligation to truly be your brother or sister’s keeper.

Researchers in the social sciences and educational practitioners find themselves caught up amid change and share a responsibility to look after those who are fragile, to think about new ways to see and understand them and help them see themselves. To that end, they may find metaphoric value in pushing beneath the screen’s surface. If the screen flattens all truths, beliefs, and identities into the same space, and if in the process truth twists into lies and lies twist into truth, how can they cultivate genuine community on both sides of the screen? As a conceptual metaphor, I suggest that the answer may lie deep within bogs.

6.5 Striking Inward and Downward: Capitalizing on Culture for a Replenished Community

Communicating through a payphone within the computer system giving rise to his simulated world, Neo methodically explains at the end of *The Matrix* (Wachowski, 1999):

I know you're out there. I can feel you now. I know that you're afraid...you're afraid of us...I don't know the future. I didn't come here to tell you how this is going to end. I came here to tell you how it's going to begin. I'm going to hang up this phone, and then I'm going to show these people what you don't want them to see. A world without rules and controls, without borders or boundaries. A world where anything is possible.

With that, Neo flies up and out of The Matrix, leaving the simulation behind. Virtual reality for Neo proved to be a prison, an exhausted dystopia. Having won the contest and now in control of the OASIS, Wade Watts reveals at the end of *Ready Player One* that he will shut down the OASIS every Tuesday and Thursday, requiring people to spend more time in the real world (Spielberg, 2018). The unresolved question in both movies is this: once you transcend the simulation, where do you go? I do not mean literally, that answer is clear enough. For Neo, it is the Nebuchadnezzar and Zion, for Parzival it is a cool apartment with his girlfriend sitting on his lap. Far less clear is what it will look like for people inured by the system to live their lives in the here and now, together with others. What will provide the coherent life narrative for people susceptible to the simulation's ephemeral alterations? I am far less interested ultimately in what Neo and Parzival are running from and would like to think more about what they are running to.

In *The Matrix*, humanity's subjugation within virtual reality happened because machines placed humans at their service. In *Ready Player One*, people have chosen to subjugate themselves as an escape from disappointment in their offline lives. Yet, the liberation hinted at in both films

falls short of conceptualizing a path forward that allows Neo, Parzival, and others within their worlds to experience a coherent life where online and offline life replenish each other, where communities exist on both sides of the screen—each constantly influencing and constructing the other. Rather than encouraging students to abandon the virtual locations of their identity, educators can imagine with them how to find a more transcendent and durable sense of themselves and each other. A turn inward and downward into the values and beliefs that bind families, schools, communities, and nations may offer adolescents more firm beginnings as they construct personal identities and avoid the darker side of technologically-based paradoxes contributing to anxiety and depression. As an aesthetic counterpoint to the depthlessness negatively associated with life on the screen, imagine a conceptual turn inward and downward, into something more enduring than the ever-alterable virtual landscape. Imagine as a contrast to the screen’s clean and crisp images where anything is possible, something rugged and natural, dense with time and memory, encased in the sustaining earth:

Our Pioneers keep striking
Inwards and downwards,

Every layer they strip
Seems camped on before.

The bogholes might be Atlantic seepage.
The wet centre is bottomless. (Heaney, 1975/1969 p. 25)

During the year that he wrote “Bogland,” the Nobel Prize-winning Irish poet, Seamus Heaney, also read P.V. Glob’s (1965) *The Bog People*. Heaney found metaphoric value in the well-preserved bodies found deep in bogs where favorable conditions preserved the fingerprints, hair, caps, tunics, skirts, and even blindfolds for nearly 2000 years. Heaney perceived Ireland’s bogs as a “dark casket where we have found many of the clues to our past and to our cultural identity” (Atfield, 2007, p.63). Heaney’s primary metaphor compares the process of digging into

the bogs with the act of remembering and accounting for atrocities of the past, trauma persisting into the present moment. In his poem, “Digging,” Heaney writes, “Nicking and slicing neatly, heaving sods/ Over his shoulder, going down and down/ For the good turf. Digging.../ Between my finger and my thumb / The squat pen rests. / I’ll dig with it” (1966, p. 13). Heaney’s bogs offer a location of cultural identity in layered time, a location far less mutable than the flashing images on the screen. In Heaney’s (1975) bog poems, “the ground itself is kind, black butter / Melting and opening underfoot” (p. 26) and his primary interest centers on unearthing the “preserved bodies of men and women found in the bogs of Jutland, naked, strangled or with their throats cut, disposed under the peat since early Iron Age times” (Heaney, 1980, p. 56). For Quinlan (1983), Heaney is “unearthing a terrible beauty” (p. 365) in his depiction of those excavated victims of violence.

For my purposes, the bog poems suggest an obligation and an opportunity for independent schools. First, for those schools whose past includes marginalization, oppression, and abuse, “unearthing a terrible beauty” requires naming and knowing those atrocities and the systems and circumstances making them possible. This means accounting for those particular lives harmed or ignored by the institution. This is an obligation. Second, the process of excavation may also reveal the school’s deeply moral and immutable purpose that defines its present-day actions. Pursing that associated opportunity means ensuring equitable access to and an inclusive experience within the school community for all constituents. Quinlan’s (1983) analysis of Heaney’s (1975) poem “The Tollund Man” (p. 38) offers the most effective representation of the metaphoric obligation and opportunity I have in mind. Quinlan explains, “The grim centerpiece of the poem is the bog-preserved body of a young adulteress who was killed thousands of years ago for her ‘crime’” (p. 366):

I can feel the tug.
of the halter at the nape
of her neck...
I can see her drowned
body in the bog...
her shaved head
like a stubble of black corn. (Heaney, 1975, p. 38)

Independent schools slicing back layers of their own bogs may learn from the kinds of bodies frequently silenced in their past. In Heaney's poem, after imagining her trauma, the persona "realizes what his own attitude would probably have been on the occasion of her public execution" (p. 366).

My poor scapegoat,
I almost love you
but would have cast, I know,
the stones of silence.
I am the artful voyeur
Of your brain's exposed
and darkened combs,
your muscles webbing
and all your numbered bones. (Heaney, 1975, p. 38)

In Quinlan's appraisal, the persona "recounts his passivity when, in present-day Belfast, he has seen Catholic girls tarred and feathered by the IRA for dating 'enemy' British soldiers" (pp. 366-367). As independent school leaders cultivate replenished communities in the age of networks, they will be called upon to no longer play the role of the artful voyeur casting stones of silence. Rather, fully aware of the past's persistence, the head of school can support all aspects of equity and justice in the present moment, connecting that work to the school's moral tradition. Having avoided false innocence, school leaders can contextualize present-day relationships in the context

of an enduring tradition, the kind of emotional anchoring that serves as a “homogenous and balanced environment” (Dewey, 1938, pp. 25-26), not for the sake of excluding others, but for the benefit of connecting one’s own identity to a robust and enduring tradition.

Heney’s bog poems offer a useful metaphor to imagine conceptually what this looks like. With its wet bottomless center, Ireland offers a fertile landscape for accessing a deeper sense of identity rooted in physical space. The unique cultural identity explored in the bog poems offers a rich and stabilizing point of departure for a life disconnected from place and a physically-located community. More anxious and depressed than ever, children and teens today need strong communities and clear direction. Although the shattered mirror disrupted narrow and oppressive truth claims, it also created shards where anything is possible. Adolescent identity formation in those conditions also has the potential for depthlessness. Complicated further by the manifestations of postmodernism, particularly the weakening of historicity and commodification of the self, adolescent development today may occur without the benefit of any binding sense of stable community and neighborhood. The exhaustion of a coherent life narrative—a sense of who we are and why we do what we do—requires replenishment and independent schools are perfectly suited to do the work.

Schools of all types benefit from constructing a clear and purposeful sense of community. Knowledge of core values and purpose are essential not in the name of timid adherence, but as a validation of purpose-driven action in the moment. NAIS member schools in the United States have an opportunity to position themselves for the digital age, while using the core values of their missions as a vital underpinning for adolescent identity formation. Those values should stretch upwards to students’ networked lives and guide their action purposefully through the paradoxes shaping their experience. Heads of school cannot assume that the ways they have always

established school community's identity and purpose will resonate with today's networked adolescents. Innovating around community purpose—including the ways educators know and engage students and establish their purpose in the broader community—begins with understanding why this recontextualizing matters. Conventional tactics should not be confused with the purposes informing and driving those tactics. In his book, *How the Mighty Fall*, Collins (2009) writes:

When the rhetoric of success ('We're successful because we do these specific things') replaces penetrating understanding and insight ('We're successful because we *understand why* we do these specific things and under what conditions they would no longer work'), decline will very likely follow. (p. 21)

Intentional communities guided by core values can avoid extinction by internally understanding and externally explaining *why* and *to what end* our values matter relative to the ambivalence complicating students' lives and contributing to their anxiety today. In this regard, a school community's values and long-established beliefs prove not to be a set of confining shackles, but a clear way forward amidst so much clutter, an opportunity to extend who we are and why we do what we do.

I like the bog poems not only because they foreground the importance of physical space as an underpinning of identity, but also because they offer a way of thinking about engagement, empathy, and mutual empowerment. For independent schools, far from being a passive experience of docile *inheritance*, active engagement in a school's history and tradition generates a sense of historic community and continuity, an experience leading to the foundation of a coherent life narrative. Dewey's assertion that:

we have a problem of discovering the connection which actually exists within experience between the achievement of the past and the issues of the present. We have the problem

of ascertaining how acquaintance with the past may be translated into a potent instrumentality for dealing effectively with the future. (1938, p. 23)

Heads of school share an opportunity to sort out how to extend their schools' long-established values into deliberate emotional anchors providing stability and connection in our students' networked lives. Dewey's formulation suggests that educators should be explicit and intentional about how their schools' traditions, layered over time, can counterbalance the emotional distress brought by the radical uncertainty and endless contradictions complicating students' lives. Students need structure, clarity, and direction, not in some old-fashioned form of oppression—a return to Fordist education and assembly line passive learning, for example—but in a way that replenishes their sense of self and other, that revives their sense of purpose.

Schools committed to the identity-anchoring aspects of their missions face the same fundamental challenge that Collins (2009) ascribes to all great companies. He explains:

Like an artist who pursues both enduring excellence *and* shocking creativity, great companies foster a productive tension between continuity *and* change. On the one hand, they adhere to the principles that produced success in the first place, yet on the other hand, they continually evolve, modifying their approach with creative improvements and intelligent adaptation. (p. 36)

In other words, those great companies and successful independent schools never lose sight of their core values and purpose *and* they know why the tactics associated with those values and fulfilling that purpose matter and under what conditions they may no longer be viable. Collins continues, “when institutions fail to distinguish between current practices and the enduring principles of their success, and mistakenly fossilize around their practices, they’ve set themselves up for decline” (p. 36). As heads of school evangelize the mission for relationship-based education in the age of

networks, heads of school need to tell compelling stories giving new life and purpose to the core values and traditions of their schools as reliable emotional anchors for students whose well-being requires replenishment. Educators may dig into their schools' metaphoric bogs not because they are stuck, but to prevent the exhaustion associated with constantly inventing who they are. For within the layers of communities' most enduring values, students may experience meaningful replenishment. More importantly, school leaders who define and model care ethics and associated listening practices will create conditions for that replenishment. The gesture I am advocating is not about "telling" networked adolescents how to be according to a school's values, but listening to adolescents talk about how their networked experience complicates those values. To be clear—the act of listening and responding in ways that resonate with their experience matters most.

7.0 Digital Humanitarianism

7.1 Welcome Back Mr. Boyden: Replenishing Community in the Age of Networks

This dissertation presents a story about unintended consequences. Digital networks connecting people around the world via mobile technology and social media platforms offer utopian and dystopian possibilities. While some of the utopian hopes have materialized, so have several dystopian fears. The appraisal of communication technology's collateral damage could erroneously lead to two missteps. First, educators and parents may conclude that the social and emotional toll of excessive screen time through mobile devices outweigh the technology's benefits and therefore need to be eliminated altogether. While as the head of a school for children from preschool through 8th grade I accept that conclusion for young children, I do not agree with it for children of middle school age and beyond. Second, educators and parents may place responsibility on technologists to develop comprehensive and aggressive safeguards to eliminate children's emotional fallout associated with technology. The history of technology and society suggest that neither solution offers the kind of protection people hope to achieve and may lead to unexpected problems of their own. Consider society's reaction to the sinking of the Titanic.

Captain Edward Smith had reason to believe in 1907 that his transatlantic steamer of iron and steel could not be sunk. The ship's scale and speed symbolized engineering brilliance and lesser ocean liners had survived collisions with icebergs. Yet, many of the Titanic's strengths, including its speed and size, intensified the likelihood and outcome of the tragedy. Technology's progress contributed to unintended consequences and people demanded enhanced safety requirements. Reforms included heightened expectations for ships to monitor airwaves, broadened

patrols for identifying icebergs, and the International Convention for the Safety of Life at Sea called for ships to carry enough lifeboats to hold every passenger” (Tenner, 2012, para. 6). Reflexive modernity’s cautionary tale advises that the progress of protection can lead to its own unintended consequences. Tenner (2012) explains, “The addition of lifeboats made some vessels less stable; the excursion ship *Eastland*, already relatively top-heavy before the installation of post-Titanic lifeboats, capsized in Chicago Harbor in 1915, killing 844 passengers” (para. 6). Like society following the Titanic disaster, Educators and parents today run the risk of calling for technology-based controls that introduce new forms of collateral damage.

The responsibility shared by all people concerned with the social, emotional, and cognitive wellbeing of children and adolescents today involves wholehearted presence, empathetic listening, and genuine curiosity. In other words, we are called upon to assume the responsibility of researchers monitoring an experiment. My focus on unintended consequences is designed neither to provoke quick reactions to abandon technology or introduce aggressive new controls, but to call upon all who are concerned to practice care ethics so that children and adolescents may feel less alone in their ambivalence and so that interested parties may learn from their experience. What educators, parents, and technologists learn from children and adolescents will lead to enhanced technologies, but they will be responsive to the actual needs of children rather than the speculation of adults.

Regarding social media and mobile devices, teens and heads of independent schools share a sense of ambivalence about the technology’s perceived effects. For minorities of both groups, the technology has had a mostly negative or mostly positive effect. But the largest share of both teens and heads of school believe that the effect is neither positive nor negative. At the start of this dissertation, I presented the most evident affordances and harmful consequences of social

media and mobile technology. Yet, there is a flip side to each of those, an alternate reality experienced by those who perceive mostly positive effects. Among the affordances and opportunities associated with social media and mobile technology include:

Relationships

- Constant virtual connection made possible new forms of caring.
- Life-sharing status updates introduced new ways to understand others.
- Virtual friendship hubs created opportunities to expand circles of care.
- Perceived private messages brought new forums for authenticity.

Identity

- Individual pages and channels introduced new perspectives on the evolution of personal identity.
- Dynamic virtual opportunities to create identity introduced performance as a vital part of being.
- Online identity creation initiated the mutual reinforcement of real and virtual selves.
- Social media platforms presented persistent new structures for discovering the worth of others.

Habits of Mind

- Compelling and addictive virtual life elevated the needs of offline community.
- Engrossing vicarious experience strengthened real world connections.
- The shrinking of space and time accelerated access and care for people in need.
- Networks revealed the common humanity of people across differences and renewed civil discourse.

While this alternate reality likely exists for many people, the general current social and emotional condition of all school-age students requires renewed attention and care. For that reason, this story begins with social media and mobile technology's collateral damage rather than its favorable affordances. Just days after announcing his retirement from the consulting business he started, Pat Bassett, NAIS's widely-celebrated and effective president from 2001 to 2013, sent a message via his Twitter account. Having benefitted from Pat's guidance and vision for two decades, I read the message with great interest. The timing led me to ascribe some weight to the communication. As if he were saying, before I stop paying such close attention to what is happening at our schools, I need you all to listen to this:

two challenges schools are not generally addressing well, or at all, are 1.) Growing anxiety and depression among school-age students at all levels; 2.) marketing and messaging that misses the point because it focuses on ‘features’ of the program, and not ‘outcomes’ for students. (2018, July 19)

Heads of school likely hold a variety of opinions on the sources of students’ anxiety—hyper-competitive parents, grade-obsessed notions of success, information overload, increased competition in all forms, constant comparison with others, fear of missing out, complicated perceptions of self and others brought by social media, college placement pressures, uncertainty over their futures—stand out in the research literature and in schools as possible contributing sources. Each of these, and most others worthy of mention, share a common characteristic—the rise of networks accelerated them or made them possible.

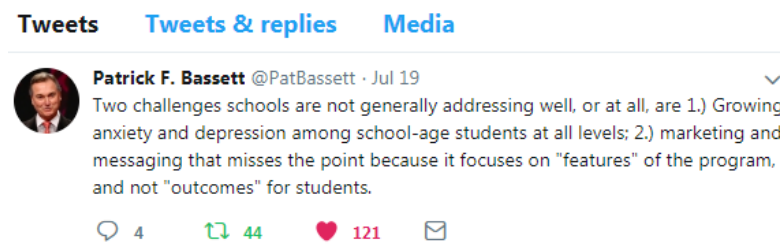


Figure 16. Tweet from Patrick F. Bassett about challenges facing NAIS schools

Significant numbers of students are increasingly anxious and depressed. I worry that their condition will not improve without significant innovation around how educators perceive and understand them. The push in schools to focus on students’ social and emotional lives matters, and NAIS has encouraged renewed attention and offered direction. Yet, so much of educators’ work plays out on the surface, offering tactics and approaches to ameliorate the manifestations of complex and chronic distress brought by the structural conditions of their lives. To be sure, social and emotional wellness initiatives help considerably and represent an important step forward.

However, educational initiatives organized to directly address the unintended consequences of meshing adolescents together through digital networks requires conceptual and practical refinement. I have two suggestions.

First, this period of reflection has led me to believe that the time has come to move away from the “digital citizenship” concept. In the late fall of 2018, with caravans of refugees and asylum seekers surging towards the southern border of the United States, and ideologues bitterly split over how they should be handled, the concept of citizenship draws immediate attention to insiders and outsiders. Suggesting that digital citizenship and social-emotional skills are inseparably linked (Heitner, 2017) feels helpful. Under critical scrutiny, however, it invites the possibility that networks may connect people who do not deserve kindness. To be clear, I do not have in mind the worst case, and statistically unlikely, scenario of an adolescent connecting with a predator intending to do harm. The response in those circumstances is clear—perceive the risk and block them. I have in mind the standard fare of their more nuanced online experience—peers at their school and across town hoping to be included and valued.

The currency in youth culture is social power and social media platforms have made it painfully easy to measure who’s in and who’s out. Technology’s unintended consequences complicating students’ relationships, sense of identity, and habits of mind require educators to advocate for and model relationship practices over principles. In conversations with students, heads of school and teachers can model an appreciation of differences, listening to students’ experience not with judgment and solutions, but with curiosity and empathy. Insisting upon the virtues of good digital citizenship creates the unintended risk of students feeling even more alone and isolated in their networked lives. If telling students, for example, to be good digital citizens

by respecting self and others through digital etiquette were enough, then teachers could put posters up on classroom walls and proceed to the next initiative.

I am advocating a shift towards “digital humanitarianism,” a practice conceptually supported by the cosmopolitan belief in the value of others. Appiah (2006) defines cosmopolitanism as two strands that intertwine,

One is the idea that we have obligations to others, obligations that stretch beyond those to whom we are related by the ties of kith and kind...The other is that we take seriously the value not just of human life but of particular human lives. (xv)

On the surface, this call for an appreciation of others runs the risk of becoming a principle rather than a practice. While the shift to humanitarianism offers a more inclusive direction than citizenship, it can be reduced to a platitude if viewed as an abstract concept to embrace. Digital humanitarianism seeks mutual empowerment, a way of being in relation with others where the objective is not to persuade or to win, but to grow reciprocally stronger in the process of listening to others. Appiah (2006) suggests, “Often enough, as Faust said, in the beginning is the deed: practices and not principles are what enable us to live together in peace” (85). By grounding listening practices in care ethics, educators may help students engage others through networks with a greater sense of mutuality, the practice of shared respect and responsiveness.

Second, to this end, I am advocating that educators define the cornerstone of digital humanitarianism as a listening process designed to help individuals and communities thrive on and offline. The mediated nature of online connection eliminates psychological processes triggered through face to face interactions. At present, some students lack the capacity to comprehend or feel emotional hurt experienced by those on the other side of the screen. By modeling genuine engagement with students, being fully present with them and valuing the unique contours of their

interconnected worlds, educators might introduce the Golden Rule as a humanitarian process for the digital age. Educators may consider asking students to explore the difference between: Do unto others as you would have them do unto you *and* Do unto others as they would have done unto them. The rule's original version in the context of others connected through devices allows individuals to feel satisfied thinking of their own needs. The second version affords students the opportunity to experience looking at life from another person's perspective, a process of engagement requiring mutual empathy and care.

I believe these two priorities, reframing online obligations to each other as “digital humanitarianism” and understanding that concept as a listening process have the potential to help students thrive in their lives on and offline. By thrive I mean that students connected by networks and guided by humanitarian practices may feel a greater sense of vitality; they may develop a clearer sense of themselves and others; their circle of care may extend well beyond the “in group;” and a heightened sense of the worth of others may be realized. How can independent school leaders model these two priorities effectively? To answer that question at this study's end invites a return to the beginning.

Mac Farrell, a student at Frank Boyden's Deerfield Academy, could not complete his English papers during the structured evening study hall. His muse visited between the hours of midnight and dawn. Mr. Boyden listened to Mac's request to stay up all night with curiosity and he embedded his response within the community. He asked the student body, “Are you willing to let Mac Farrell stay up all night writing his English papers?” he said. ‘Mac Farrell alone?’” (McPhee, 1966, pp. 24-25). Boyden's listening practice and community response feels valuable and models care ethics and community-building practices. This seems to have been Mr. Boyden's default setting. Committed to seeing every one of his students every day, long before the age of

networks, Frank Boyden decided that his desk belonged in the building's main thoroughfare. Boyden's preference resonates not only with heads of school today, but also with CEO's and innovation leaders committed to cultivating connected and thriving communities. In *The Ten Faces of Innovation*, Tom Kelley explains Boyden's influence on office design at IDEO, the world's leading design firm:

The constant interaction provided him with a well-informed intuition about individuals and the student body as a whole, giving him an uncanny ability to spot small morale problems before they got to be big ones...to Frank Boyden, the 'important' place for himself was not the corner office on the top floor. It was right in the midst of the people he cared about most. (Kelley, 2005, pp. 212-213)

At IDEO, space serves as a transformational and powerful tool to generate creativity and collaboration. By placing leadership near the heart of the action—just paces away from the mail room and central kitchen—Kelley established a closer connection with the team and developed an intuitive sense of how things are going.



Figure 17. Photo: The placement of Mr. Boyden's desk at Deerfield Academy

Whether it is a school chair at the entrance, a small desk in the main hallway, or a crossroads where people can predict their presence, heads of school today extend Boyden's tradition not only because it makes good business sense, it is also a lot of fun. On a fall morning about a decade ago, Noah approached me with an optimistic smile achievable only by a fifth grader. Not yet burdened by the race for SAT scores or Advanced Placement honors, All State

distinction or college placement, Noah said, “Mr. Barnett...I learned something very important today.” I noticed his tie’s haphazard knot and joyfully scuffed shoes, “Wow Noah. You haven’t even had class yet. Tell me what you’ve learned.” He proudly replied, “I look really good in teal. My mom said this is the best shirt ever.” I could not help but ask what he intended to do with this discovery. “That’s easy,” he explained. “Wear more teal.”

Strong relationships underlie all great successes in education. A week earlier I found Noah in the school library staring with anguish at his iPad. I understood. I have given the same look to my iPad. “What’s troubling you, Noah?” I asked. “This *My Hero* project makes me so mad. There is so much stuff to do. I’m supposed to pick a hero. Then talk with some kid I don’t know from another country.” I asked Noah to list the qualities he believes a hero should have, then helped him think about how that list might lead to a specific hero. A few days later, Noah found me in the cafeteria. No longer troubled, he said, “Mr. Barnett I finished my project. I got matched up with a boy from Iraq. He’s also eleven years old. Guess what—we practically have the same hero ideas. And we both picked the same hero.” Genuinely surprised, I asked him to tell me about the hero they both chose. He smiled and said, “We both picked our dads!”

Perhaps someday those of us entrusted to oversee the development of students’ minds and character will have greater access to the invisible architecture overlaying their physical reality. For now, heads of school perceive with increasing clarity paradoxes cutting at every level of their work and the utopian possibilities and dystopian fears associated with their students’ networked lives. Educators share an opportunity to model digital humanitarianism through listening practices based in care ethics. In their book, *The Students Are Watching*, Ted and Nancy Sizer (1999) assert that schools have three primary purposes, “to prepare young people for the world of work; to prepare them to use their minds well, to think deeply and in informed ways; and to prepare them

to be thoughtful citizens and decent human beings.” (p. 10) As digital networks give rise to new paradoxes complicating students’ lives, schools face a unique opportunity to help young people reimagine their connection with their schools and each other, to form new emotional anchors providing stability through the waves of change that roll through their worlds.

Two decades ago, Maxine Greene anticipated the emerging responsibility for schools to take a more active role in creating greater social cohesion and shared purpose among people. She predicted that schools would need to reconnect members of society to each other as politics failed to foster shared responsibility:

What has diminished perhaps is the political will of governments, at least in the West, to pursue the goals of social cohesion and social solidarity...With the decline of socially integrating institutions and the consequent atrophy of collective social ties, education may soon again be called upon to stitch together the fraying social fabric. (Greene, 1997, p. 187)

From my perspective, this is a transformational moment in educational policy and practice where educators may find valuable the process of discovering within themselves the emotions their students experience as they sort through ambivalence in their networked experience. By enacting those feelings within themselves, educators may extend authentic appreciation for students’ experience, a form of wholehearted engagement that’s worthwhile in its own right and may lessen students’ feelings of anxiety and loneliness.

Students stand at dystopia’s edge and their lives abound with ambivalence and uncertainty. In their relationships, they find constant connection with new and old friends, sharing familiar interests and introducing new ones, friends with whom they can celebrate their camaraderie and can share private communication at will. *And* they feel lonely much of the time, fearful of

exclusion, unwanted public shame, or being spied upon by someone seeking to harm them. Influencing their identity development, students find endless opportunities to recreate themselves and a vast marketplace to share what they have to offer, a new sense of self-presentation and multiple platforms to stand out. *And* they feel the baggage of their past online utterances coupled with the pressure to fit in, a sense that they have little control over what people say about them and who they may become as a result. Shaping their habits of mind, students have instant and endless enjoyable and engaging escapes from their real-world troubles and an opportunity to tell their own stories however they see them. *And* they risk addiction to their devices, drawn in to an open forum where all information and diversion are possible, and the only trust-worthy ideas reverberate through an alluring echo chamber requiring nothing of its users except mindless agreement.

The same networks that might have conditioned Noah, my former student who looks good in teal, to hate people different from himself instead revealed to him a shared humanity. Underlying whatever opinion he would one day form about the Middle East, in his mind there will always be a boy on the other side of the world who loved his father as much as he loved his own father. Noah engaged the “networked other” with curiosity, valuing and wanting to be part of the other’s world. Heads of school may find value in elevating within their school’s core values respect for the needs of others and appreciating differences, practices offering children an opportunity to walk in someone else’s shoes through empathetic listening. Leaders can follow Walt Whitman’s (1886) “Song of the Open Road” and demonstrate the “profound lesson of reception, neither preference nor denial” (p. 44). In this final gesture “If I take refuge in ambiguity, I can assure you that it’s quite conscious.” Do you know who said that? Frank Boyden.

This is not the first generation of school leaders at the helm during a period of radical economic, social, and cultural change. In his Convocation Address at Deerfield Academy, Brian Rosborough explains

Shortly after taking on the Academy, Mr. Boyden began to reveal his strategy to anyone who would listen, ‘Conditions in the country are changing,’ he would say. ‘Trolleys, automobiles and such things have tended to break down the influence of the home. Times are changing in the country and somebody has got to right things up... The high school seems to be the place to begin. Some people say teenagers have gone to the dogs, I don’t believe it!’ said Mr. Boyden.” (2002)

The cultural currency of schools is relationships, and by strengthening students’ social, emotional, and cognitive well-being in ways necessitated by networks, I too believe we can improve conditions. The fate of independent schools begins with the students. Mr. Boyden knew this and reminded his students frequently, “‘I think we can build the best school in the country, and if we do, it will be your success....If we can only do this, we will do it right’” (Rosborough, 2002). *It will be your success.*

Leadership practices cultivating in students a deeper sense of vitality, a more enduring sense of self-worth, and a renewed responsibility for the wellbeing of others will need time to have an effect on society. I fear that social media echo chambers validating hate and contributing to atrocity have moved some members of society beyond redemption, past the point of perceiving humanity within the other, a condition I feel rather intensely. I share this sentiment on Saturday, October 27, at 12:00 noon from my office at St. Edmund’s Academy in Squirrel Hill, Pittsburgh. Hours ago, the sirens of first responders began and did not stop. Over a dozen students were hard at work practicing their play just steps away from my office door. Concerned that something

terrible had happened, I entered the auditorium and found several of them huddled around a phone. “Is it true? Is Nic involved in a shooting?” They were receiving real time texts from a classmate whose house was a staging ground for the SWAT team whose weapons were pointed at Tree of Life synagogue just three blocks from our school. It turns out that the gunman had recently posted on Gab, a social media site that is a haven for hatred passed off as free speech. Without a word, numb parents picked up their children one by one. “Can we go home now?” The children asked. “Yes...the gunman is in custody.” They looked afraid. Their eyes filled with tears. “We saw what’s happening,” they said.

They saw what’s happening and it becomes the educator’s responsibility to see with them, to hear them process their experiences, to teach through attentiveness and empathy. These practices modeled for them and cultivated within them may lead to more generous emotions surging through networks. Digital humanitarianism receives the experience of others with empathy and care and responds in ways that resonate with the experience. Exactly one week after the atrocity at Tree of Life, I took a break from my final reading of this dissertation. I walked to my favorite coffee shop on Forbes Avenue in the heart of Squirrel Hill. When I stepped to the front of the line, the barista said, “Today’s coffee is free.” I smiled and said, “Wow...that’s surprising.” She looked hopeful. She said, “This was completely unexpected. They called this morning and asked to pay for all drinks purchased today. I guess there is a lot of love in the world.” She pointed to a small sign on the counter. It said this:

IF YOU WOULD LIKE TO THANK FRASERWOODS MONTESSORI SCHOOL
FAMILIES & ALUMNI FOR SHOWING LOVE TO PGH all the way from
NEWTOWN, CT, PLEASE EMAIL
KATHY [VARDAJK@AOL.COM]

In this moment of reflection, educators could overemphasize the technology itself as the origin of unintended consequences. Yet, the meshing together of so many people revealed not a problem with devices, but with the humanity of users. While modest, common sense adjustments to devices may create conditions for improved wellbeing among school children of all ages, the greatest strides forward for society hinge on the way educators listen to children and model care for others. There is fierce urgency now to model the practice of care.

Appendix A The Survey of PAIS Heads of School

noreply@qualtrics-research.com

Request for Participation--PAIS Heads of School Survey

MAIN LETTER

I hope the school year is coming to a successful conclusion for you. I am reaching to the Heads of School at all PAIS member schools seeking your perspective on the rise of social media and mobile technology in your school community. This is an optional survey conducted through the University of Pittsburgh and not affiliated with PAIS or any other organization.

For the past twenty years, many of us have been fascinated and troubled by how social media and mobile technology have impacted our students' lives and our schools' climate and culture. I have heard many of you share your concerns.

I am distributing this survey to the Heads of School at all PAIS member schools. I am focused on Pennsylvania because I am the Head at a PAIS member school (St. Edmund's Academy, Pittsburgh) and because I am conducting this research study with the guidance of my dissertation advisor at the University of Pittsburgh.

The survey and associated research methods—including data security—have been approved by the University of Pittsburgh's IRB and I am not collecting or tracking names or other information connecting responses to specific individuals.

The survey should take approximately 15 minutes and includes a few optional open-ended questions. I know this is a busy time of year for all of us and can only hope that these questions provide an interesting diversion as we race to the end of the year *and* that they lead to helpful generalizations about how we are experiencing and navigating the complexity and opportunity brought by networks.

If you would like to be more involved in this study, please contact me directly. All information collected through the survey is anonymous.

I will send two reminder emails—June 4 and June 11.

Sincerely,

Chad Barnett
PhD Candidate, University of Pittsburgh
Head of School
St. Edmund's Academy
Pittsburgh, PA 15217
412-521-1907 x 115
chadbarnett@stedmunds.net

FIRST BUMP

This is a second request hoping you will have time to complete a survey distributed to the Heads of School at all PAIS member schools. Please remember this is an optional survey conducted through the University of Pittsburgh and not affiliated with PAIS any other organization.

The survey and associated research methods—including data security—have been approved by the University of Pittsburgh’s IRB and I am not collecting or tracking names or other information connecting responses to specific individuals.

The survey should take approximately 15 minutes and includes a few optional open-ended questions. I know this is a busy time of year for all of us and can only hope that these questions provide an interesting diversion as we race to the end of the year *and* that they lead to helpful generalizations about how we are experiencing and navigating the complexity and opportunity brought by networks.

If you would like to be more involved in this study, please contact me directly. All information collected through the survey is anonymous.

I will send one final invitation for your participation on June 11.

Sincerely,

Chad Barnett
PhD Candidate, University of Pittsburgh
Head of School
St. Edmund’s Academy
Pittsburgh, PA 15217
412-521-1907 x 115
chadbarnett@stedmunds.net

SECOND BUMP

This is my final request hoping you will have time to complete a survey distributed to the Heads of School at all PAIS member schools. Please remember this is an optional survey conducted through the University of Pittsburgh and not affiliated with PAIS any other organization.

The survey and associated research methods—including data security—have been approved by the University of Pittsburgh’s IRB and I am not collecting or tracking names or other information connecting responses to specific individuals.

The survey should take approximately 15 minutes and includes a few optional open-ended questions. I know this is a busy time of year for all of us and can only hope that these questions provide an interesting diversion as we race to the end of the year *and* that they lead to helpful generalizations about how we are experiencing and navigating the complexity and opportunity brought by networks.

If you would like to be more involved in this study, please contact me directly. All information collected through the survey is anonymous.

This is your final opportunity to be part of this study.

Sincerely,

Chad Barnett
PhD Candidate, University of Pittsburgh
Head of School
St. Edmund's Academy
Pittsburgh, PA 15217
412-521-1907 x 115
chadbarnett@stedmunds.net

SURVEY QUESTIONS INCLUDING MULTIPLE CHOICE WHEN APPLICABLE

Q1 - How many years have you been working in education?

- 0-5
- 6-10
- 11 – 20
- 21-29
- 30+

Q2 - How many years have you been a Head of School?

- 0-5
- 6-10
- 11-20
- 21-29
- 30+

Q3 - How many students are enrolled at your school?

- Fewer than 200
- 201 to 300
- 301 to 450
- 451 to 600
- 601 to 800
- 801+

Q4 - What grade levels are served at your school? (Select all that apply).

- ☐ Preschool
- ☐ Prekindergarten
- ☐ Kindergarten
- ☐ First
- ☐ Second
- ☐ Third
- ☐ Fourth
- ☐ Fifth
- ☐ Sixth
- ☐ Seventh
- ☐ Eighth
- ☐ Ninth
- ☐ Tenth
- ☐ Eleventh
- ☐ Twelfth
- ☐ Post Graduate

Q5 - What type of school do you lead?

- ☐ Day
- ☐ Boarding
- ☐ Day/Boarding
- ☐ Boarding / Day

Q6 - What gender(s) does your school serve?

- ☐ Coeducational
- ☐ Single-Sex Boys
- ☐ Single-Sex Girls

Q7 - Which of the following labels most closely describe your school—choose all that apply

- ☐ Traditional
- ☐ Progressive
- ☐ Religiously Affiliated

Q8 - To which gender identity do you most identify?

- ☐ Female
- ☐ Male
- ☐ Transgender Female
- ☐ Transgender Male
- ☐ Gender Variant / Non-Conforming
- ☐ Not Listed
- ☐ Prefer not to answer

Q8a – (IF) You replied “NOT LISTED” – please tell us how you identify

Q9 – What is your age?

- 25-35
- 36-45
- 46-55
- 56-65
- 66+

Q10 - Social media has impacted student life and culture at my school in a way that is

- Entirely Positive
- Mostly Positive
- Neutral
- Mostly Negative
- Entirely Negative

Q11 - Mobile devices have impacted student life and culture at my school in a way that is

- Entirely Positive
- Mostly Positive
- Neutral
- Mostly Negative
- Entirely Negative

Q12 - Peer to Peer Communication: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

Peer to Peer Communication: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?				
	Never	Rarely	Occasionally	Frequently
Malicious or cruel messages sent				
Sexually explicit or provocative messages sent				
Social cruelty—including exclusion and gossip				
Weakened face-to-face communication skills				
A diminished ability to patiently solve interpersonal problems				
A need to overshare personal information				

Q12A – Please describe any additional peer-to-peer communication challenges brought by social media and mobile technology.

Q12B – In reference generally to the group of Peer-to-Peer challenges listed above, to what degree do you agree or disagree with each of the following statements:

	Disagree	Somewhat disagree	Somewhat agree
These are familiar problems made worse by mobile technology and social media			
These are new problems and we need new ways to address them			
These are not problems that our schools should sort out—they start in the home			

Q13 – Identity Complications and Violations of Personal Privacy: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

Identity Complications and Violations of Personal Privacy: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?				
	Never	Rarely	Occasionally	Frequently
Pictures or videos of students shared without their permission				
Vulnerability to outsiders seeking to harm students				
Pressure to stand out, be noticed, and liked online				
Borrowed phones misused by peers				
Pressure to share passwords with peers				
A lack of student awareness into how social media platforms manipulate behavior				

Q13A – Please describe any additional identity complications and violations of personal privacy challenges brought by social media and mobile technology.

Q13B – In reference generally to the group of Identity Complications and Violations of Personal Privacy challenges listed above, to what degree do you agree or disagree with each of the following statements:

	Disagree	Somewhat disagree	Somewhat agree
These are familiar problems made worse by mobile technology and social media			

These are new problems and we need new ways to address them			
These are not problems that our schools should sort out—they start in the home			

Q14 - Habits of Mind Manipulated by Social Media and Mobile Technology: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

Habits of Mind Manipulated by Social Media and Mobile Technology: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?				
	Never	Rarely	Occasionally	Frequently
An inability to be in the moment				
Diminished attention span				
A constant sense of distraction				
Diminished evidence of emotional intelligence				
Technology overdependence or addiction				
Ignorance around how social media platforms manipulate and condition behavior				

Q14A – Please describe any additional habits of mind manipulation by social media and mobile technology you have observed.

Q14B – In reference generally to the group of Habits of Mind Manipulated by Social Media and Mobile Technology challenges listed above, to what degree do you agree or disagree with each of the following statements:

	Disagree	Somewhat disagree	Somewhat agree
These are familiar problems made worse by mobile technology and social media			
These are new problems and we need new ways to address them			
These are not problems that our schools should sort out—they start in the home			

Q15 - Information Discernment and Academic Development: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

Information Discernment and Academic Development: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?				
	Never	Rarely	Occasionally	Frequently
Academic cheating through mobile device or social media				
Weak academic research informed by untrustworthy sources				
Inappropriate use of a mobile device during the school day				
Susceptibility to manipulation by misinformation, fake news, or twisted facts				
Access to information that could lead to unhealthy or harmful actions				
Diminished classroom participation skills				

Q15A - Please describe any additional information discernment and academic development challenges brought by social media and mobile technology.

Q15B – In reference generally to the group of Information Discernment and Academic Development challenges listed above, to what degree do you agree or disagree with each of the following statements:

	Disagree	Somewhat disagree	Somewhat agree
These are familiar problems made worse by mobile technology and social media			
These are new problems and we need new ways to address them			
These are not problems that our schools should sort out—they start in the home			

Q16 - When your Administrative Team sorts through routine disciplinary issues involving mobile devices and social media, how likely are you to undertake each of the following:

	Definitely Not	Possibly	Definitely
Questioning students involved			
Discerning various levels of involvement among students			
Warning students about the near and long term risks associated with their behavior			
Scaring students with hope that they will avoid the behavior in the future			
Helping students understand the impact their behavior has on others			

Exploring with students the gap between their “real” and “online” choices			
Helping students think about the ways social media and mobile devices manipulate their behavior			
Shaping in students a deeper awareness of how their identity shifts from one context to another			

Q17 - How likely are you to support educational initiatives in each area below as a way to counteract challenges associated with social media and mobile devices in your school today?

	Definitely Not	Possibly	Definitely	Already Implemented
Cultivating face-to-face communication and problem solving skills				
Providing students with a deep sense of their school and community’s tradition and identity				
Deepening in students a sense of their own personal identity and strengthening their confidence in themselves				
Teaching students to detect how and when their choices are manipulated by their technology				
Restricting usage of mobile phones and social media during the school day				
Cultivating in students an ability to see both real and virtual at once, to see the way they blend and pull at each other				

Q17A - Are there other initiatives you've found to be effective?

Q18 - Of the disciplinary cases you faced this year, approximately what percentage involved a mobile device or social media?

- 100 percent
- 70 percent to 99 percent
- 30 percent to 69 percent
- 0 percent to 29 percent

Q19 - How important are each of the following priorities in supporting students who thrive in their networked lives?

	Not Important	Moderately Important	Important	Very Important
A formal education program on social media and mobile technology usage.				

A more informed perspective from my administrative team regarding my students' use of social media and technology.				
My leadership approach—including the way I frame, interpret, and discuss the challenges related to social media and mobile technology.				

Q20 - Please share any additional thoughts on how the rise of social media and mobile technology has impacted your work and responsibilities as Head of School.

Appendix B Complete Overall Results

Table 1. Survey Response: How many years have you been in education?

How many years have you been in education?	
0 - 5 years	1
6 - 10 years	0
11 - 20 years	3
21 - 29 years	13
30+ years	12

Table 2. Survey Response: How many years have you been head of school?

How many years have you been head of school?	
0 - 5 years	9
6 - 10 years	9
11 - 20 years	10
21 - 29 years	1
30+	0

Table 3. Survey Response: How many students are enrolled at your school?

How many students are enrolled at your school?	
Fewer than 200	7
201 - 300 students	11
301 - 450 students	4
451 - 600 students	2
601 - 800 students	2
801+ students	3

Table 4. Survey Response: What kind of school do you lead?

What kind of school do you lead?	
Day	23
Day / Boarding	3
Boarding / Day	1
Boarding	2

Table 5. Survey Response: What gender does your school serve?

What gender does your school serve?	
Coeducational	25
Single-Sex Girls	2
Single-Sex Boys	2

Table 6. Survey Response: Which of the following labels most closely describes your school?

Which of the following labels most closely describes your school?	
Traditional	9
Progressive	6
Religiously affiliated	4
Traditional, Progressive	4
Traditional, Religiously affiliated	3
Progressive, Religiously affiliated	2
Traditional, Progressive, Religiously affiliated	1

Table 7. Survey Response: To which gender identity do you most identify?

To which gender identity do you most identify?	
Female	10
Male	19

Table 8. Survey Response: What is your age?

What is your age?	
36 - 45 years old	4
46 - 55 years old	12
56 - 65 years old	11
66+	2

Table 9. Survey Response: Social media has impacted student life and culture at my school in a way that is

Social media has impacted student life and culture at my school in a way that is	
Neutral	10
Mostly positive	9
Mostly negative	10

Table 10. Survey Response: Mobile devices have impacted student life and culture at my school in a way that

Mobile devices have impacted student life and culture at my school in a way that is	
Neutral	9
Mostly positive	11
Mostly negative	8
Entirely negative	1

Table 11. Peer to Peer Communication: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

	Frequently	Occasionally	Rarely	Never
Malicious or cruel messages sent	20.69%	58.62%	20.69%	0.00%
Sexually explicit or provocative messages sent	6.90%	51.72%	41.38%	0.00%
Social cruelty—including exclusion and gossip	31.03%	65.52%	3.45%	0.00%
Weakened face-to-face communication skills	68.97%	24.14%	6.90%	0.00%
A diminished ability to patiently solve interpersonal problems	31.03%	62.07%	3.45%	3.45%
A need to overshare personal information	48.28%	44.83%	6.90%	0.00%

Table 12. Peer to Peer Communication: Perceptions of the Problem

	Agree	Somewhat agree	Somewhat disagree	Disagree
These are familiar problems made worse by mobile technology and social media	58.62%	37.93%	3.45%	0.00%
These are new problems and we need new ways to address them	24.14%	44.83%	27.59%	3.45%
These are not problems that our schools should sort out—they start in the home	0.00%	0.00%	44.83%	55.17%

Table 13. Identity Complications and Violations of Personal Privacy: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

	Frequently	Occasionally	Rarely
Pictures or videos of students shared without their permission	17.24%	62.07%	20.69%
Vulnerability to outsiders seeking to harm students	3.45%	20.69%	68.97%
Pressure to stand out, be noticed, and liked online	58.62%	37.93%	3.45%
Borrowed phones misused by peers	6.90%	44.83%	44.83%
Pressure to share passwords with peers	6.90%	34.48%	51.72%
A lack of student awareness into how social media platforms manipulate behavior	62.07%	27.59%	10.34%

Table 14. Identity Complications and Violations of Personal Privacy: Perceptions of the Problem

	Agree	Somewhat agree	Somewhat disagree	Disagree
These are familiar problems made worse by mobile technology and social media	24.14%	58.62%	13.79%	3.45%
These are new problems and we need new ways to address them	41.38%	37.93%	17.24%	3.45%
These are not problems that our schools should sort out—they start in the home	3.45%	0.00%	34.48%	62.07%

Table 15. Habits of Mind Manipulated by Social Media and Mobile Technology: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

	Frequently	Occasionally	Rarely	Never
An inability to be in the moment	62.07%	34.48%	3.45%	0.00%
Diminished attention span	65.52%	31.03%	3.45%	0.00%
A constant sense of distraction	68.97%	31.03%	0.00%	0.00%
Diminished evidence of emotional intelligence	13.79%	72.41%	13.79%	0.00%
Technology overdependence or addiction	68.97%	31.03%	0.00%	0.00%
Ignorance around how social media platforms manipulate and condition behavior	65.52%	31.03%	0.00%	3.45%

Table 16. Habits of Mind Manipulated by Social Media and Mobile Technology: Perceptions of the Problem

	Agree	Somewhat agree	Somewhat disagree	Disagree
These are familiar problems made worse by mobile technology and social media	34.48%	44.83%	17.24%	3.45%
These are new problems and we need new ways to address them	51.72%	37.93%	3.45%	6.90%
These are not problems that our schools should sort out—they start in the home	0.00%	0.00%	34.48%	65.52%

Table 17. Information Discernment and Academic Development: From your experience with social media and mobile technology's impact on students, how would you rate the frequency of these challenges?

	Frequently	Occasionally	Rarely	Never
Academic cheating through mobile device or social media	17.24%	51.72%	27.59%	3.45%
Weak academic research informed by untrustworthy sources	17.24%	55.17%	6.90%	3.45%
Inappropriate use of a mobile device during the school day	17.24%	55.17%	3.45%	3.45%
Susceptibility to manipulation by misinformation, fake news, or twisted facts	17.24%	41.38%	24.14%	0.00%
Access to information that could lead to unhealthy or harmful actions	17.24%	68.97%	6.90%	3.45%
Diminished classroom participation skills	17.24%	48.28%	31.03%	3.45%

Table 18. Information Discernment and Academic Development: Perceptions of the Problem

	Agree	Somewhat agree	Somewhat disagree	Disagree
These are familiar problems made worse by mobile technology and social media	37.93%	51.72%	10.34%	0.00%
These are new problems and we need new ways to address them	37.93%	41.38%	17.24%	3.45%
These are not problems that our schools should sort out—they start in the home	0.00%	0.00%	31.03%	68.97%

Table 19. Survey Response: When your Administrative Team sorts through routine disciplinary issues involving mobile devices and social media, how likely are you to undertake each of the following:

	Definitely	Possibly	Definitely not
Questioning students involved	89.66%	10.34%	0.00%
Discerning various levels of involvement among students	86.21%	13.79%	0.00%
Warning students about the near and long term risks associated with their behavior	89.66%	10.34%	0.00%
Scaring students with hope that they will avoid the behavior in the future	0.00%	48.28%	51.72%
Helping students understand the impact their behavior has on others	96.55%	3.45%	0.00%
Exploring with students the gap between their “real” and “online” choices	65.52%	34.48%	0.00%
Helping students think about the ways social media and mobile devices manipulate their behavior	68.97%	27.59%	3.45%
Shaping in students a deeper awareness of how their identity shifts from one context to another	58.62%	34.48%	6.90%

Table 20. Survey Response: How likely are you to support educational initiatives in each area below as a way to counteract challenges associated with social media and mobile devices in your school today?

	Definitely Not	Possibly	Definitely	Already implemented
Cultivating face-to-face communication and problem solving skills	0.00%	0.00%	37.93%	62.07%
Providing students with a deep sense of their school and community’s tradition and identity	0.00%	3.45%	31.03%	65.52%
Deepening in students a sense of their own personal identity and strengthening their confidence in themselves	0.00%	3.45%	48.28%	48.28%
Teaching students to detect how and when their choices are manipulated by their technology	0.00%	24.14%	55.17%	20.69%
Restricting usage of mobile phones and social media during the school day	0.00%	13.79%	13.79%	72.41%
Cultivating in students an ability to see both real and virtual at once, to see the way they blend and pull at each other	0.00%	31.03%	44.83%	24.14%

Table 21. Survey Response: Of the disciplinary cases you faced this year, approximately what percentage involved a mobile device or social media?

Of the disciplinary cases you faced this year, approximately what percentage involved a mobile device or social media?	
0% to 29%	12
30% to 69%	14
70% to 99%	3
100%	0

Table 22. Survey Response: How important are each of the following priorities in supporting students who thrive in their networked lives?

	Very important	Important	Moderately important	Not important
A formal education program on social media and mobile technology usage.	51.72%	24.14%	20.69%	3.45%
A more informed perspective from my administrative team regarding my students' use of social media and technology.	31.03%	58.62%	6.90%	3.45%
My leadership approach—including the way I frame, interpret, and discuss the challenges related to social media and mobile technology.	34.48%	51.72%	13.79%	0.00%

Appendix C A Literary Way of Knowing Networked Teens

In my experience as a young administrator in the early 2000's, networked teens presented my school's veteran administrative team with a unity problem. I recall my long-tenured headmaster asking, "What in the hell is wrong with these girls?" Followed by, "We should throw all the damn computers and phones into the creek." Troubling gaps between their real lives and online presentations created distress among administrators responsible for keeping them safe and upholding the school's image. The idea of imposing unity and coherence on their lives unprecedentedly expanded by forays into virtual territories felt like nostalgia—longing for a mythological time before things fell apart, when the center still could hold. Analogously, early critics of *The Crying of Lot 49* lament Oedipa's limitations and her world's fragmentation. In his May 1966 Review of the novel, Richard Poirier argues that the problem with "knowing" in *Lot 49* lies not in the world of the text, but in Oedipa's inadequacy:

the role given to Oedipa makes it impossible to divorce from her limitations the large rhetoric about America at the end of the novel. This is unfortunate simply because Oedipa has not been given character enough to bear the weight of this rhetoric...What I think is happening at the end is that Pynchon desperately needs to magnify the consciousness of his heroine, if he is to validate her encounter with The Tristero System. Only by doing so can he maintain the possibility that the System is distinguishable from the mystery and enigma of America itself. (pp. 42-43)

For the sake of establishing a center that might still hold, Poirier asserts that even the randomness of Pynchon's labyrinth can be made fully meaningful by a character with enough *character*. A

character better endowed with the right cunning could hold it all together, unity of form or purpose could bring the depth necessary to understand the mystery and enigma of America itself.

In addition to expecting organic unity in our students, my school's administrative team in the early 2000's also expected students to experience panic and terror in the face of abyss of their networked identities. Similarly, early critics of *The Crying of Lot 49* inscribe upon Oedipa a longing for meaning that seems beyond her interest. This is particularly true in Stanley Trachtenberg's 1966 article in the *Yale Review*, in which he explains, "here the parody is directed not only at man's absurd situation, but at his frantic efforts to extricate himself from it, focused in Oedipa Maas's conviction of some meaningful system eluding her just below the feverish surface of society" (p. 133). While society might be feverish and surface oriented, Oedipa's generally blasé reaction does not suggest desperation, but feels more like Frederic Jameson's *waning of affect*. As he explains:

As for expression and feelings or emotions, the liberation, in contemporary society, from the older *anomie* of the centered subject may also mean not merely liberation from every other kind of feeling as well, since there is no longer a self present to do the feeling. (p. 15)

Oedipa's discovery *and* projection of the W.A.S.T.E. network do not reflect a modernist *scream* or panic to an absurd situation, but a general acceptance or blasé reaction to the impossible circumstances of her life. This is not to suggest that Oedipa does not attempt to infuse the signifiers around her with meaning, but that when such meaning fails to hold she shows no signs of shock or alarm. Oedipa seems to implicitly understand that the compulsion to hold all the pieces together is a form of madness, a sensibility shared by my students caught up in social media scandals and railed against by the administrators who fully raise their modernist hackles.

The collective outrage over students' publicly evident fragmented identities and the apparent "depthlessness" of their new virtual environing conditions did not lead to productive solutions. I sensed a need for relevant analytical tools allowing us to stand with students as they crossed thresholds into new worlds where fixed, stable, or permanent meanings are no longer viable. The methodological assumptions proving most helpful began with the perspective that our students' online identities—comprised of social networking profiles, videos, and images—did not contain absolute meaning in isolation, but held general significance dispersed along a whole chain of other profiles. In other words, as signifiers of their actual body, the web of signs that entangle students always alter the students' online presentations. Students' networked lives gather meaning through a "sprawling, limitless web where there is a constant interchange and circulation of elements, where none of the elements is absolutely definable and where everything is caught up and traced through by everything else" (Eagleton, 1996, p. 112). Just as critics later in *Lot 49's* reception history moved past the compulsion to fix Tristero, W.A.S.T.E., and the muted post horn into definitive categories, I felt value in abandoning the search for coherence and unity in favor of embracing elusiveness, ambivalence, and ephemerality in their networked experience and my perception of it.

The referents at the base of the primary signifiers—their actual bodies beneath the highly stylized networked representation of those bodies—remain enigmatic because they are always that which is not spatially present and that which may or may not be evident at another point in time. This ambivalence and ephemerality render incongruent the earlier critical practices that focused on our students' lack of organic unity, the conclusive matter of absolute proof, and the expectation of terror and anxiety in the face of their fragmentation. Pynchon scholarship took a similar turn

most clear in Frank Kermode's piece, "The Use of Codes in *The Crying of Lot 49*" (1973). Kermode explains that:

If the systems are to work, and the book to work as a system, it will be because the reader can do what Oedipa could not when confronted with Maxwell's demon: make the piston move, reverse the entropy of communication as that device reverses physical entropy. But if you make the eyes of this novel move, or if you believe in the original plot on which it depends, you risk a kind of madness, which is the ultimate cost of holding everything together in a single design. (p. 14)

Kermode asserts that madness is the likely result of an attempt to hold all the signs together in a single design. The implication of his analysis is that readers should not expect *The Crying of Lot 49* to function as a "system" at all. Kermode suggests further that, "The book is crammed with disappointed promises of significance, with ambiguous invitations to paradigmatic construction, and this is precisely Oedipa's problem. Is there a structure *au fond*, or only deceptive galaxies of signifiers" (p. 11)? Kermode's logic of inquiry offers a blueprint for making only provisional meaning out of our students' online performances. Instead of fixating on the schizophrenic flickering between their virtual and real lives, we could invite them to join us in developing critical tools that minimize the risk and fallout associated with online manipulation. Readers could develop with them new habits of mind to avoid the invisible traps ever-present in their networked experience.

In her 1983 book length study, *Ideas of Order in the Novels of Thomas Pynchon*, Molly Hite takes that classic bit of advice from *Gravity's Rainbow* suggesting that "If they can get you asking the wrong questions, they don't have to worry about answers." She argues that:

As the plot develops, the question of the Tristero's existence or nonexistence becomes beside the point. The overt purpose of the parody in *Lot 49* is to show that Oedipa's world is deficient...Oedipa's world cries out for so much meaning that the novel cannot reasonably expect to satisfy it. (p. 78)

Hite indicates that the purity of the linear narrative that reassures and comforts the reader in *The Crying of Lot 49* is in fact a parody of our desire to have everything fit into neat spaces with clearly definable, knowable meanings. *Lot 49* feeds our desire to "know" the narrative as we watch a single character from the perspective of a single, omniscient narrator, but simultaneously this seemingly straight forward narrative tricks us with sliding, ambiguous, and vague signifiers at every narrative turn. Thus, Hite argues that we are wasting our interpretive powers by our incessant attempts to scratch new and exciting meaning out of signifiers that others have already ripped apart and have yet yielded nothing. Hite explains,

In seeking the World behind the clues, she loses sight of the motive behind her quest. She wants to break out of her tower by discovering a world that is not her own solipsistic creation but still one that offers some place for her desires and needs. She looks for a world that is *like* her. But she does not see how the world she does discover continually reflects back her own image...Ironically, she is offered the grounds for community in a sense of shared estrangement. Because of her quest, she has discovered a world that is neither indifferent nor alien, but she ignores this information. The Tristero has forced her to see, but she believes she sees only clues to the Tristero. (p. 87)

Hite suggests that the desire driving Oedipa, and quite often the reader, to build significance from the detritus of a trippy California wasteland and to demand connected revelations out of the tendrils of urban sprawl may be more than a world like Oedipa's can offer. Perhaps the act of reading

Oedipa's world should not be a quest to discover the referent at the base of the Tristero, but to recognize that the Tristero is the medium of communication bringing Oedipa, and her readers, in touch with a community of sensitives longing for connection in a rambling and often incoherent world. Yet, this presents a possible blind corner—namely that making sense of networked adolescent lives through a linear narrative of embodied alienation to virtual connection oversimplifies the point. I felt the need to place additional pressure on the symbolic nature of their online presentations to begin with.

In *Symbolic Exchange and Death*, Jean Baudrillard traces the origin and evolution of the simulacra. He explains that initially the sign, or image, reflects a basic reality. Under these conditions the sign is so close to the original that it infuses the observer with a sense of the original's reality, or referent, at its base. Secondly, is the possibility that the sign masks or perverts the basic reality of the original. That which exists at the base of the signifier is unattainable and therefore any replication of it is a distortion. Next is the possibility that the sign marks an absence of a basic reality. Finally, Baudrillard defines the postmodern moment by a recognition of signs that bear no relation to any reality whatever—the sign becomes its own pure simulacrum. Under this fourth and final order of simulacra, signs are completely empty and become valuable not for what they represent or promise, but because of what they are in and of themselves. I sensed that this logic of inquiry might help explain the gap between my students' actual self and their online presentation. The gap leading them to say, "I don't know why I did it," or "I wish adults at this school would understand those pictures are not really us." Once again, Pynchon scholarship offers a useful blueprint.

In the context of *The Crying of Lot 49* the implication is that Tristero never existed so the muted post horn, W.A.S.T.E., and Tristero are all deceptions that mask the truth of a non-existent

grand referent. They are pure simulacrum. In her 1997 article, “(De)constructing the Image: Thomas Pynchon’s Postmodern Woman,” Patricia Bergh explains that Oedipa’s most consequential discovery in *The Crying of Lot 49* is that “there is danger in unmasking images since they dissimulate the fact that there is nothing behind them”(p. 4). The implications for networked adolescents and the adults in their lives cut in all directions.

For every sign that Oedipa unpacks in the novel there is a lingering realization that it signifies nothing but itself and the community in which it immerses her. The excess of signs that appear to be infinitely meaningful, but in fact are conspicuously devoid of substance, leaves Oedipa longing for a sense of self. For each realization that her signifiers are empty, Oedipa finds herself feeling increasingly less complete. As Bergh explains:

For Oedipa, an ordered perspective of the world would permit her to define a solid place for herself. However, her obsessive need to establish a firm order of things becomes too great a task for her to handle. She needs, as Baudrillard suggests in *The Precession of Simulacra*, a visible past that will enable her to establish at least a myth of origin. (p. 4)

Of course, because the signs in *Lot 49* never yield even the semblance of an absolute referent, Oedipa’s quest to sort out the estate of her deceased lover, Pierce Inverarity, and to discover the possible reality of an underground communication system designed to rival the United States Postal Service, become of secondary importance to contemporary critics who read *Lot 49* as a woman’s search for identity and self-awareness in a postmodern world. Regarding Oedipa’s quest for identity, Bergh explains that:

Because Oedipa’s identity has been defined by the reflected light of the males surrounding her, their disappearances force her to choose between fading away herself or to somehow originate her own source of illumination...Lacking any other feasible course of action, she

is obliged to rely upon her own resourcefulness to find direction. The emergence of this new self-originating initiative is the turning point of the novel and changes completely the way that Oedipa views herself, and accordingly dictates how the outside world is to view her. (p. 5)

Bergh's shift in emphasis from the importance of the empty, floating signifiers, and towards what those signifiers reveal about Oedipa's wants, desires, and needs suggests that our collective fetish for simulacra in postmodern society explains far more about who we are than what the simulacra might reveal if we only ask it better questions.

The implication is clear—we do not see the world as it is, we see it as we are. Inspired by the limits to understand students' lives newly complicated by networks, I began this study with the assumption that reality in general—and their reality in particular—is not fixed or objective. Its ephemeral nature requires those of us charged with knowing and supporting them to grapple with the meanings we construct and project onto their lives. Mark Hawthorne's 1998 article, "Pynchon's Early Labyrinths," reaches a similar conclusion regarding how Oedipa makes sense of her world and how we make sense of her making sense of her world. He explains that, "by meandering through a 'murky' chain of associations, Oedipa may slowly discover a truth about herself, not necessarily about the outside world" (p. 86). Hawthorne reads the novel as a heap of hollow signifiers that explains more about the desires of Oedipa and the reader than they explain about their own reality. He asserts:

Oedipa's quest abruptly ends when she enters the auction room....While the quester remains serious...the reader increasingly suspects that Pynchon has created a maze to befuddle, confuse, and finally poke fun at the reader him/herself, a maze that we traverse

hoping to find a solution, only to discover in the end that all we can do is traverse the maze again and again...the novel becomes its own hidden room. (p. 89)

Hawthorne invites us to read Pynchon's labyrinth as Oedipa's mobius strip, a solipsistic hamster's wheel that we find ourselves running with her for a while, until we choose to step back and accept with a wink and a nod that none of this was so serious in the first place.

Bibliography

- Alsop, R. (2008). *The trophy kids grow up: How the millennial generation is shaking up the workplace*. San Francisco: Jossey-Bass.
- Althusser, L. (1971). Ideology and ideological state apparatuses. In B. Brewster (Ed.), *Lenin and philosophy and other essays* (pp.85-126). New York, NY: Verso.
- Anderson, M. & Jiang, J. (2018). "Teens, social media & technology 2018." *Pew Research Center*. Retrieved from <http://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/>
- Appiah, K. (2007). *Cosmopolitanism: Ethics in a world of strangers*. New York, NY: WW. Norton & Co.
- Asimov, I. (1978). My own view. In R. Holdstock (Ed.), *The Encyclopedia of Science Fiction*. UK: WH Smith.
- Atfield, J. (2007). *A Jungian reading of selected poems of Seamus Heaney*. Lewiston, NY: Edwin Mellen Press.
- Bargh, J., McKenna, K., & Fitzsimons, G. (2002). Can you see the real me? Activation and expression of the 'true self' on the internet. *Journal of Social Issues*, 58, 33. doi: 10.1111/1540-4560.00247
- Barnett, C. (2000). Reviving cyberpunk: (Re)constructing the subject and mapping cyberspace in the Wachowski brothers' film *the matrix*. *Extrapolation*. 41, 4.
- Barnett, C. (2009). Towards a methodology of postmodern assemblage: Adolescent identity in the age of social networking. *Philosophical Studies in Education*, 40, 200-210.
- Bassett, P. (2013). The third great American revolution. *Independent School Magazine*. Summer 2013.
- Bassett, P. (2009). High Anxiety, the sequel. *Independent School Magazine*. Summer 2009.
- Basu, B. (2013). What faction are you in? The pleasure of being sorted in Veronica Roth's *divergent*. In B. Basu, K. Broad, & C. Hintz (Eds.), *Contemporary dystopian fiction for young adults: brave new teenagers* (pp. 19-33). New York: Routledge.
- Basu, B., Broad, K., & Hintz, C. (2013). Introduction. In B. Basu, K. Broad, & C. Hintz (Eds.), *Contemporary dystopian fiction for young adults: brave new teenagers* (pp. 1-18). New York: Routledge.

- Baudrillard, J. (1981). *Simulacra and simulation*. Ann Arbor, MI: University of Michigan Press.
- Bauman, Z. (2007). *Consuming life*. Cambridge, MA: Polity Press.
- Beck, U. (1992). *Risk society: Towards a new modernity*. Thousand Oaks, CA: SAGE Publications.
- Beck, U. Giddens, A., & Lash, S. (1994). *Reflexive modernization: Politics, tradition and aesthetics in the modern social order*. Stanford, CA: Stanford UP.
- Bergh, P. (1997). (De)constructing the image: Thomas Pynchon's postmodern woman. *Journal of Popular Culture*, 30(4), 1-12.
- Bortree, D. (2005). Presentation of self on the web: an ethnographic study of teenage girls's weblogs. *Education, Communication, & Information*, 5, 25-39.
- Bosman, J. (2018, March 2). Anatomy of a school lockdown: A threat, then the anxious wait. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/03/02/us/threat-school-shooting.html>
- Bowles, N. (2018, February 4). Early Facebook and Google employees form coalition to fight what they built. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/02/04/technology/early-facebook-google-employees-fight-tech.html>
- boyd, d. (2014). *It's complicated: the social lives of networked teens*. New Haven, CT: Yale UP.
- Bukatman, S. (1993). *Terminal identity: The virtual subject in cyberspace*. Durham, NC: Duke Univeristy Press.
- Buttler, J. (1991). Imitation and gender insubordination. In D. Fuss (Ed.), *Inside/Out*. New York, NY: Routledge.
- Calvino, I. (1974). *Invisible Cities*. New York, NY: Harcourt.
- Caplan, S. (2003). Preferences for online social interaction: A theory of problematic internet use and psychosocial well-being. *Communication Research*, 30, 625-648.
- Carter, A. (1980). *The bloody chamber and other stories*. New York, NY: Harper & Row.
- Cather, W. (1913). *O pioneers!* New York, NY: Houghton Mifflin Co.
- Cerulo, K. (1997). Reframing sociological concepts for a brave new (virtual?) world. *Sociological Inquiry*, 67(1), 48-58. doi: 10.1111/j.1475-682X.1997.tb00428.x
- Chase, S. E. (2005). Narrative Inquiry: Multiple Lenses, Approaches, Voices. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 651-679). Thousand Oaks, CA: Sage Publications Ltd.

- Cixous, H., & Clement, C. (1986). Sorties. In H. Cixous & C. Clement (Eds.), *The Newly Born Woman* (pp.63-134). Minneapolis, MN: University of Minnesota Press.
- Cline, E. (2012). *Ready player one*. New York, NY: Broadway Books.
- Cole, D. (2006). Education and the politics of cyberpunk. *The Review of Education, Pedagogy, and Cultural Studies*, volume #27, 159-170.
- Collins, J. (2009). *How the might fall: And why some companies never give in*. New York, NY: Harper Collins.
- Coolahan, J. (1994). *The report of the national education forum on education*. Dublin: Government Publications.
- Crook, C. (2011). The digital native in context: tensions associated with importing web 2.0 practices into the school setting. *Oxford Review of Education*, 38(1), 63-80.
- Cyr, B.-A., Berman, S., & Smith, M. (2014). The Role of Communication Technology in Adolescent Relationships and Identity Development. *Child Youth Care Forum*, 44, 79-82.
- de Freytas-Tamura, K. (2018, March 19). What's next for humanity: Automation, new morality, and a 'global useless class'. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/03/19/world/europe/yuval-noah-harari-future-tech.html>
- Deleuze, G. (1977). *Dialogues II*. New York, NY: Continuum.
- Deleuze, G., Guattari, F., & Massumi, B. (1987). *A thousand plateaus: capitalism and schizophrenia*. Minneapolis, MN: University of Minnesota Press.
- DePillis, L. (2017). America's wealth gap is bigger than ever. *CNN Business*. Retrieved from <https://money.cnn.com/2017/11/03/news/economy/wealth-gap-america/index.html>
- Dennis-Tiway, T. (2018). Taking away the phones won't solve our teenager' problems. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/07/14/opinion/sunday/smartphone-addiction-teenagers-stress.html>
- Derrida, J. (1982). *Margins of philosophy*. Chicago, IL: University of Chicago Press.
- Dewey, J. (1938). *Experience and Education*. New York, NY: Touchstone.
- Discover Woodberry Forest: Our Community. (2018, October 20). Retrieved from <https://www.woodberry.org/page/about/discover-woodberry>
- Downham, M. (1988). Cyber-Punk. *Vague*, 35-50.
- Eagleton, T. (1996). *Literary theory: An introduction*. Malden: Blackwell Publishing.

- Elhai, J., Dvorak, R., Levine, J., & Hall, B. (2016). Non-social features of smartphone use are most related to depression, anxiety and problematic smartphone use. *Computers in Human Behavior*. 10.1016
- Ellis, C. (1993). 'There are survivors': telling a story of sudden death. *Sociological Quarterly*, 34(4), 711-730.
- Ellison, N., & Boyd, D. (2013). Sociality through SNS. In W. Dutton (Ed.), *The Oxford handbook of internet studies* (pp. 151-172). Oxford: Oxford University Press.
- Evans, R. (2009). Surviving and thriving in hard times. *Independent School Magazine*, Summer 2009.
- Fish, T. *On the innovation journey* / Interviewer: A. Pinkus. *Independent School Magazine*, Spring 2017.
- Foucault, M. (1978). *The history of sexuality*. New York, NY: Random House.
- Fox, S. (2005, January 9). *The future of the internet*. Retrieved from Pew Internet & American Life Project: <http://www.pewinternet.org/2005/01/09/the-future-of-the-internet-i/>
- Frankel, M. and Schechtman, J. (2010). The intentional path to headship: what you don't know can hurt you. *Independent School Magazine*. Fall 2010.
- Gardella, J., Fisher, B., Teurbe-Tolon, Abbie. (2017). A systematic review and meta-analysis of cyber-victimization and educational outcomes for adolescents. *Review of Educational Research*. 87.2.
- Giddens, A. (1991). *Modernity and self-identity: self and society in the late modern age*. Stanford, CA: Stanford UP.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard UP.
- Goffman, E. (1959). *The Presentation of self in everyday life*. New York, NY: Doubleday.
- Greene, M. (1988) *The dialectic of freedom*. New York, Teachers College Press.
- Greenhow, C., & Askari, E. (2015). Learning and teaching with social network sites: A decade of research in K-12 related education. *Education Information Technology*, 22(2), 623-645.
- Grisso, A., & Weiss, D. (2005). What are gURLs talking about?: Adolescent girls' construction of sexual identity on GURL.com. In S. Mazarella (Ed.), *girl wide web: Girls, the internet, and the negotiation of identity* (pp. 31-50). New York, NY: Peter Lang.
- Hamilton, A. (2015). Not your parents' headmaster. *Independent School Magazine*. Spring 2015.

- Haraway, D. (1990). *Simians, cyborgs, & women: The reinvention of nature*. New York, NY: Routledge.
- Harding, S. (2003). *The feminist standpoint theory reader: Intellectual and political controversies*. New York, NY: Routledge.
- Harman, J., & Hansen, C. (2005). Liar, liar: Internet faking but not frequency of use affects social skills, self-esteem, social anxiety, and aggression. *CyberPsychology & Behavior*, 8(1), 1-6.
- Harris, T. (2018, March). Retrieved from [humanetech.com: http://humanetech.com/](http://humanetech.com/)
- Hawthorne, M. (1998). Pynchon's early labyrinths. *College Literature*, 25(2), 79-93.
- Hawthorne, N. (2004/1850). *The scarlet letter*. New York, NY: Signet.
- Heaney, S. (1966). *Death of a naturalist*. New York, NY: Faber and Faber.
- Heaney, S. (1975). *North*. New York, NY: Faber and Faber.
- Heaney, S. (1980). *Preoccupations: Selected prose 1968-1978*. New York, NY: Farrar, Straus & Giroux.
- Heitner, D. (2017). Digital citizenship and social-emotional skills are inseparable. *NAIS*. Retrieved from <https://www.nais.org/learn/independent-ideas/january-2017/digital-citizenship-and-social-emotional-skills-ar/>
- Hinduja, S., & Patchin, J. (2008) Cyberbullying: an exploratory analysis of factors related to offending and victimization. *Deviant Behavior*. 29.2.
- Hite, M. (1983). *Ideas of order in the novels of Thomas Pynchon*. Columbus, OH: Ohio State University Press.
- Hobbs, T. (2017). Losing students, private schools try to change. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/losing-students-private-schools-try-to-change-1514557437>
- Jackson, M. (1989). *Paths toward a clearing: Radical empiricism and ethnographic inquiry*. Bloomington, IN: Indiana University Press.
- Jameson, F. (1991). *Postmodernism: Or, the cultural logic of late capitalism*. Durham, NC: Duke University Press.
- Johnson, G., Pupilampu. (2010). Internet use and child development: the techno-microsystem. *Australian Journal of Educational and Developmental Psychology*. 10.
- Kao, J. (2017). Education in the age of innovation. *Independent School Magazine*. Spring 2017.

- Kermode, F. (1973). The use of codes in *The Crying of Lot 49*. In H. Bloom (Ed.), *Thomas Pynchon* (pp. 11-14). New York, NY: Chelsea House.
- Kelley, T. (2005). *The ten faces of innovation: IDEO's strategies for beating the devil's advocate & driving creativity throughout your organization*. New York, NY: Doubleday.
- Kindlon, D. (2003). *Too much of a good thing: Raising children of character in an indulgent age*. New York, NY: Miramax.
- Kurtz, H., Loyd, S., Harwin, A., & Osher, M. (2018). School leaders and technology: Results from a national survey. *Education Week Research Center*. Bethesda, MD: Editorial Projects in Education Inc.
- Lapore, J. (2017). A golden age for dystopian fiction. *New Yorker*. Retrieved from <https://www.newyorker.com/magazine/2017/06/05/a-golden-age-for-dystopian-fiction>
- Lewis, J. (2017). A sticker price problem that's set to pop. *Independent School Magazine*. Summer.
- Liau, A., Khoo, A., & Ang, P. (2005). Factors influencing adolescents engagement in risky Internet behavior. *Cyberpsychological Behavior*. 8.6.
- Looney, S. (2009). Finding opportunity in crisis. *Independent School Magazine*. Summer.
- Lopez, M. and Stern, K. Headship 2.0: A call to re-imagine the organizational chart. *Independent School Magazine*. Fall 2010.
- Lorde, A. (1984). Age, race, class, and sex: Women redefining difference. In A. Lorde, *Sister outsider: Essays and speeches by Audre Lorde*. Berkeley, CA: The Crossing Press.
- Lyotard, J. F. (1983). *The postmodern condition: A report on knowledge*. Minneapolis, MN: University of Minnesota Press.
- Mandel, R. (Director). (1992). *School ties* [Motion Picture].
- McHale, B. (1987). *Postmodernist fiction*. New York, NY: Routledge.
- McHale, B. (2010). Towards a poetics of cyberpunk. In G. Murphy, & S. Vint (Eds.), *Beyond cyberpunk: New critical perspectives* (pp. 3-28). New York, NY: Routledge.
- McAdoo, P. (2018). What does it take to be truly inclusive? *Independent School Magazine Online*. Fall 2018. Retrieved from <https://www.nais.org/magazine/independent-school/fall-2018/online-exclusive-what-does-it-take-to-truly-be-inclusive/>
- McPhee, J. (1992). *The Headmaster*. New York, NY: Farrar, Straus and Giroux.

- Melvoin, R. and Thompson, M. (2015). Good-bye, Mr. Boyden. *Independent School Magazine*. Spring 2015.
- Mogel, W. (2001). *The blessings of a skinned knee: Using Jewish teachings to raise self-reliant children*. New York, NY: Penguin Group.
- Morgan, E., & Korobov, N. (2012). Interpersonal identity formation in conversations with close friends about dating relationships. *Journal of Adolescence*, 35(6), 1471-1483. doi: 10.1016/j.adolescence .2011.09.005
- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkeley: U of California P.
- Noddings, N. (2012). The language of care ethics. *Knowledge Quest*. 40.5.
- Nordstrom, J. (2016). "A pleasant place for the world to hide": Exploring themes of utopian play in *Ready Player One*. *Interdisciplinary Literary Studies*. 18.2.
- Olverson, T. (2015). Advice for search committees (and new heads). *RG175*. Retrieved from <https://thomasolverson.wordpress.com/2015/02/12/advice-for-search-committees-and-new-heads/>
- Orth, D. and Chen, E. The strategy for digital citizenship. *Independent School Magazine*. Summer 2013.
- Osit, M. (2008). *Generation text: Raising well-adjusted kids in an age of instant everything*. New York: AMACOM.
- Pidgeon, J. (2000). *Civil words for troubled times: The writings of John A. Pidgeon, 1990-1999*. Saltsburg, PA: Kiski Press.
- Poirier, R. (1966, May 1). The crying of lot 49. *The New York Times Book Review*. Retrieved from https://archive.nytimes.com/www.nytimes.com/books/97/05/18/reviews/pynchon-lot49.html?_r=3&oref=slogin&oref=slogin&oref=slogin
- Pound, E. (2010). "In a station of the metro." In Richard Sieburth (Ed.), *Ezra Pound: new selected poems and translations* (pp. 39). New York, NY: New Directions Books.
- Pound, E. (2010). "Hugh Selwyn Mauberley." In Richard Sieburth (Ed.), *Ezra Pound: new selected poems and translations* (pp. 111). New York, NY: New Directions Books.
- Pynchon, T. (1966). *The crying of lot 49*. Philadelphia: JB Lippincott.
- Quinlan, K. (1983). Unearthing a terrible beauty: Seamus Heaney's victims of violence. *World Literature Today*. 57.3.

- Ramo, J. (2016). *The seventh sense: Power, fortune, and survival in the age of networks*. New York, NY: Little & Brown.
- Richardson, L. (1990). *Writing strategies: Reaching diverse audiences*. Thousand Oaks, CA: Sage.
- Richmond, E. (2012). Schools are more segregated today than during the late 1960's. *The Atlantic*. Retrieved from <https://www.theatlantic.com/national/archive/2012/06/schools-are-more-segregated-today-than-during-the-late-1960s/258348/>
- Rigby, J. (2006). *Raising respectful children in a disrespectful world*. Brentwood, TN: Howard Books.
- Ronson, J. (2016). *So you've been publicly shamed*. New York, NY: Riverhead Books.
- Rosborough, B. (2002, September 15). 2002 Convocation Address. Deerfield Academy.
- Said, E. (1978). *Orientalism*. New York, NY: Pantheon Books.
- Schrobsdorff, S. (2016, Oct). Teen depression and anxiety: Why the kids are not alright. *Time*. Retrieved from <http://time.com/4547322/american-teens-anxious-depressed-overwhelmed/>
- Schwartz, J. (2018). Trump's "fake news" rhetoric crops up around the globe. *Politico*. Retrieved from <https://www.politico.eu/blogs/on-media/2018/07/donald-trump-fake-news-rhetoric-crops-up-around-the-globe-media-social-media-foreign-affairs/>
- Sennett, R. (2006). *The culture of the new capitalism*. New Haven, CT: Yale University Press.
- Shakespeare, W. (2004/1610). *The tempest*. New York, NY: Simon & Schuster.
- Singh, M., Kenway, J., & Apple, M. (2007). *Globalizing education: Perspectives from above and below*. In M. Apple, J. Kenway, & M. Singh (Eds.) *Globalizing education: policies, pedagogies, & politics* (p. 4). New York, NY: Peter Lang.
- Sizer, T. and Sizer, N. (1999). *The students are watching: schools and the moral contract*. Boston: Beacon Press.
- Smallwood, S. (2002). Me and my professor. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/MeMy-Professor/33077>
- Smith, M. L., Miller-Khan, L., Heinecke, W., & Jarvis, P. (2003). *Political spectacle and the fate of American schools*. New York, NY: Routledge.
- Smith, S. (1972) "Not waving but drowning." *Collected Poems of Stevie Smith*. New York, NY: New Directions Publishing Corporation.

- Somerville, M. (2007). Postmodern emergence. *International Journal of Qualitative Studies in Education*, 225-243.
- Spielberg, S. (Director). (2018). *Ready player one* [Motion Picture].
- Steiner-Adair, C. (2015). The big disconnect. *Independent School Magazine*. Winter 2015.
- Stern, S. (2007). *Instant identity: Adolescent girls and the world of instant messaging*. New York, NY: Peter Lang.
- Suler, J. (2010). Interpersonal guidelines for texting. *International Journal of Applied Psychoanalytic Studies*, 7(4), 358-361. doi: 10.1002/aps.268
- Tenner, E. (2012). A model disaster. *Popular Science*, April 17.
- Thomlinson, J. (1999). *Globalization and culture*. Cambridge: UK: Polity Press.
- Trachtenberg, S. (1966). Beyond initiation: Some recent novels. *Yale Review* 56, 131-138.
- Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. New York, NY: Basic Books.
- Twenge, J. (2007). *Generation me: Why today's young Americans are more confident, assertive, and entitled—and more miserable than ever before*. New York, NY: Free Press.
- Twenge, J. (2017). Have smartphones destroyed a generation? *The Atlantic*.
- Valentine, S. (2014). In the maelstrom of American independent education. *Independent School Magazine*. Spring.
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: State University of New York Press.
- Venturi, R., Izenour, S., & Brown, D. S. (1977). *Learning from Las Vegas: The forgotten symbolism of architectural form*. Boston, MA: MIT Press.
- Vint, S. (2010). Afterward: The world Gibson made. In M. Graham, & S. Vint (Eds.), *Beyond cyberpunk: New critical perspectives* (pp. 228-233). New York, NY: Routledge.
- Wachowski, L. (Director). (1999). *The matrix* [Motion Picture].
- Walker, K. (2000). 'It's difficult to hide it': The presentation of self on internet home pages. *Qualitative Sociology*, 23(1), 99-120. doi: 10.1023/A:1005407717409
- Walsh, D. (2005). *Why do they act that way?: A survival guide to the adolescent brain for you and your teen*. New York, NY: Free Press.

- Watson, K. (2018). Trump says he wants 'my people' to sit at attention for him like people do for Kim Jong Un. CBS. Retrieved from <https://www.cbsnews.com/news/trump-says-he-wants-my-people-to-sit-at-attention-for-him-like-people-do-for-kim-jong-un/>
- Weinstein, E., & Selman, R. (2014). Digital stress: Adolescents' personal accounts. *New Media & Society*.
- Wheeler, B. (2017, January 29). The Trump era's top-selling dystopian novels. *BBC News*. Retrieved from <https://www.bbc.com/news/magazine-38764041>
- Whitman, W. (1886). *Leaves of grass*. London, UK: Walter Scott.
- Yeats, W.B. (1996/1919). "The second coming." In Richard Finneran (Ed.), *The Collected Poems of W.B. Yeats*. New York, NY: Scribner.
- Yorkey, B. (Director). (2017). *13 reasons why* [Motion Picture].
- Young, J. (2002). *At memory's edge: After-images of the Holocaust in contemporary art and architecture*. New Haven, CT: Yale University Press.
- Zizek, S. (1994). *Mapping ideology*. London, UK: Verso.